THE TIMES
Higher Education
SUPPLEMENT

# Job experience schemes 'should cover colleges'

by Peter Wilby

School work experience programmes should be extended to further and higher education, says the National Union of Students.

The proposal is made in the union's response to the Government's Green Paper on education. "Work experience", says the NUS, "should take place within broad educational programmes, in which preparation for work is seen as an essential part of the individual's total preparation for life."

The union calls for a new Education Act dealing with the needs of all young people. "The objective should be to secure a situation in which young workers can be 'released' to continue their education and young people in education 'released' to practical work experience situations."

The NUS criticises the Green Paper for "hopeless complacency" over job opportunities for women. "An NUS study of higher education and student employment, to be published shortly, reveals that for university graduates in 1976 sex was a more important determinant of the employment they entered than was their subject of study.

"Areas such as teaching, and personnel and welfare are overwhelmingly regarded as women's work, whereas financial work—such as accountancy—is still seen largely as the prerogative of men", says the NUS.

The union says that redundant colleges of education should be adapted to meet the schools' needs for advice on curriculum renewal and for research into curriculum objectives. They could also accommodate in-service training and courses for unemployed school leavers. Specific grants, fixed separately from the rate support negotiations, are necessary to protect in-service training and unemployed school leaver courses, says the union.

● About 63,000 extra teachers would be needed in England and Wales to fulfil the Government's policy of reducing class sizes to under 30, Mr Peter Ashby, deputy president of the National Union of Students told the union's teacher education conference in Edinburgh this week.

But the teacher supply section of the Education Green Paper was a studied exercise in political deceit. Few people in education recognised the dimensions of the impending attack, in terms of redundancies and school closures.

The Green Paper spoke of maintaining staffing standards, and of 60,000 teachers being available by the mid-80's to improve staffing standards. Mr Ashby said that by maintaining the teaching force at its present level the Government could by the mid-80s, fulfil its policy of cutting classes to below 30.

But by maintaining present staffing standards over a period when the school population would fall by 2.2 million it was promising redundancies. The major political fight in the next few years would be against Government attempts to secure voluntary or enforced redundancies.

There was a danger, he added, that a further wedge would be driven between qualified and trainee teachers. And that forced into a defensive posture teachers would accept undesirable options such as transfer, fixed-term contracts and the freezing of posts as lesser evils.

# Industry warns on specialization

by Frances Gibb

Too many qualified graduates is one reason of the failure of industry to recruit graduates, Mr Alex Jarratt, chairman of Reed International, told a conference at Hull University this week.

There had been a concentration of too many graduates in subjects not applicable to their subsequent jobs, or whose competence was not more than could be found in school leavers with A levels.

This had damaged the concept of higher education as a way into business in the minds of employers, he said.

Mr Jarratt was addressing 300 representatives of university and polytechnic careers services, the professions, industry and commerce, local government and public bodies at the biennial conference of SCUAS, the Standing Conference of University Appointments Services.

He said the resurgence of interest in industry had important implications for higher education. The first requirement for school leavers was that they possessed the practical tools for living. They needed a better understanding of their environment and a desire to use their aptitudes to contribute to and enjoy it.

It was wrong for pupils to leave school unable to read, write or communicate effectively. That was an obvious bar to obtaining worthwhile employment, and, what was more worrying, meant leavers would be unprepared for participation and involvement in industry.

He urged teachers to acquire industrial experience in their holidays so that they had an idea of what was involved. There was also a need for more adequate careers information.

Graduates had been put off industry for a number of reasons: its lack of status; the lack of a clearly defined career pattern; the risks involved; the working conditions, the size of companies and low pay.

Many of these factors were now changing. But when recruiting from universities and polytechnics, employers should be sure to send young representatives, and to give a clear idea to graduates of what they would be doing.

The four-day conference marked the end of the SCUAS and the advent of AGCAS, the Association of Graduate Careers Advisory Services. The title was changed because of a feeling among polytechnics and colleges of education, which are also involved, that the former title did not reflect the organization's true membership.

Among topics discussed were: prospects for coloured graduates; the disabled graduate, careers education, helping students at a time of high unemployment; and the employment and training of the older graduate.

A report on the problems of mature students presented to the conference by Mr Terry Smith, of the careers service at Hull University, showed that there are now more than 50,000 full-time students in British universities and polytechnics over 26 years of age.

It calls for employers to drop rigid upper age limits for graduate employment, argues that legislation against discrimination on grounds of age may be necessary and urges the Secretary of State for education to consider appointing a AGCAS representative to the new Advisory Council for Adult and Continuing Education.

Universities and polytechnics are often enthusiastic about the admission of mature students. But the report suggests there is a need for a more effective pre-course advisory service for older students. They need to be made aware of the realities of the job market before embarking on courses.

In a general discussion, Bernard Holloway, secretary of Manchester University careers and appointments services, warned that for graduates who did not want to enter the professions, the future would be increasingly uncertain.

He was particularly concerned about arts and social science students and women. The emphasis had to shift from the egocentric "What do I want?" approach to the pragmatic: "What can I give?" approach.

Mr Kenneth Dibden, director of the careers advisory service at London University, was appointed chairman of AGCAS for the next year in succession to Mr E. N. Lloyd, careers adviser at University of Wales, Aberystwyth. Mr Rodan, of Cambridge University will remain as secretary.

● Careers advisers have an important role to play in improving young people's image of industry, Mr Oakes, Minister of State for higher education, said last week.

He told the meeting of the SCUAS meeting at Hull that young people already had some very fixed ideas about the wider world when they leave school.

"Teachers and the careers service have an important part to play in improving young people's grasp of the workings of industry, of its role in producing wealth for society and of the career possibilities it offers."

They needed accurate data for this work, he said. It was clearly in the interests of industry to cooperate with schools and with higher and further education, to ensure they had the facts.

# Whitehall urged not to waste savings from education cuts

by David Walker

The Trades Union Congress this week urged the Government not to waste the resources freed by the run-down in teacher education.

It accepted, without dissent, a motion from the National Association of Teachers in Further and Higher Education warning of the danger of reducing access to higher education for women and girls, ensure that the resources released from teacher education are used to the full to secure the provision of further and higher education places, and within this, that the opportunities for women are at least maintained."

Mr Francis Cammaerts, principal of Rolle College, Devon, and president of NATFHE, told delegates meeting in Blackpool that the motion affected all those whose children wanted places in higher education and those who cared about the welfare of the young. Support for the motion came from the National Union of Teachers whose spokesman warned of a "deliberate attack on the education service in favour of elitism".

The TUC adopted a series of proposals providing mandatory maintenance awards for young people wishing to stay in full-time education after the age of 16 and a full programme of day-release for those in jobs. However, there was support for the view expressed by the General and Municipal Workers' Union that the key to solving youth unemployment lay in an autumn budget pumping money back into the economy.

The Association of University Teachers intervened during discussion of the TUC's annual report to clear up "misconceptions" about the universities. Dr C. F. Wells spoke of the "fiction" of a surfeit of student places.

The universities, he said, had been subjected to a series of squeezes during which staff had been forced to emigrate because they were so badly paid. They had not been replaced if student numbers did not reach certain minimum levels. Departments had shrunk and it was not accurate to speak of extra places.

● During the debate on the Government's policy of cash limits for the public sector, Mr Laurie Sapper, general secretary of the AUT, said cash limits inhibited the return to free collective bargaining for unions in education. Such limits were part of a Treasury strategy to impose a secondary incomes policy in the public sector.

# Management committee convenes to hear 'radical proposals'

The 30-strong committee, under the chairmanship of Mr Oakes, Minister of State for education, inquiring into the management of higher education in the public sector meets next week for one of its most important sessions so far.

It will receive reports from two sub-committees, headed by Sir Philip Rogers, the retired civil servant who is acting as Mr Oakes's deputy, and Mr M. G. Venn, the Hounslow councillor who is chairman of the Standing Conference of Regional Advisory Councils for Further Education.

They will offer the committee what one member called "fairly radical recommendations" on: new methods of funding the polytechnics and colleges; dividing institutions on the basis of how much degree level work they do; and the question of local authority control.

Committee members report a "fairly high level of agreement" on such questions as national committee to dispense funds to higher education in place of the local authorities pooling committee.

# Renovation of lodge starts

Renovation work is underway on the Master's Lodge, St John's College, Cambridge. The century-old lodge's chimneys are decaying and may have to be rebuilt but a St John's spokesman said this week that "all possibilities" were being explored.

## NEXT WEEK

Maurice Peston on the New Statesman

The Institute of Linguists

Maurice Cranston on censorship

Talking Newspapers

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# Tribunal rules that jobs claim woman may see applications

An industrial tribunal has directed that confidential personal information supplied by lecturers who applied for a vacant post at the Harper Adams Agricultural College, Newport, Salop, must be disclosed to an applicant who failed to get her name short-listed for the job.

She has claimed, at a public hearing in Shrewsbury, that she is better qualified than the man the college subsequently appointed and she has brought a case under the Equal Opportunities Act alleging that her failure was due to sexual discrimination. The college denies the claim.

The complainant is the wife of Professor C. Maxwell of the department of zoology at the University of Adelaide. Her application, made in her maiden name of Miss Constance Margaret Ann Baker—which she uses for professional purposes—was the only one from a woman.

Of the 18 other applications Miss Baker is to be allowed to examine 15, the chairman of the tribunal, Mr Anthony Gordon, ruled. He said the other three were irrelevant. He also ruled that the names and some other identifying information must be blocked out from photocopies of the documents. Salaries and titles of both existing and previous jobs will be revealed, along with bibliographies of published work.

Counsel for the college, Mr Ian Morris, said this procedure entailed a breach of confidence for those who had applied for the job. He said the field of work was narrow and little research would be required to discover identities.

Miss Baker—an agriculturalist and geneticist—conducted her own case. In evidence she said that she had seen the job advertised in The THES on January 28. Although the job description—"head of animal husbandry department"—could be interpreted as an attempt to avoid sex discrimination it could also be held to imply that men were required since few women held those positions.

She said the description of the requirements subsequently supplied by the college were diffuse and included several uses of the word "him" as well as the word "person".

Miss Baker said she made a comparison between the details given in her own application form and that of the successful candidate whose form was made available to her under equal opportunities legislation. She claimed that her qualifications were at worst similar to his, that her research work was broader and more advanced, and her published work was superior.

She also claimed that the successful applicant's educational experience had been gained in Scotland under a system very different from that operating in England, the United States or Australia.

Miss Baker alleged that on that basis, she had a right to a place on the shortlist. "I should at least have been considered" she told the tribunal.

Asked how she [illegible] experience with [illegible] successful applicant, she told the tribunal he was a technician.

"He has never risen above that. I am far better academically qualified and I would not say he has produced much although he has had a chance to do so in seven years lecturing." He had published only popular articles, while she had produced books that were used in teaching.

Miss Baker added: "I have looked after animals for others when they have been away and we do have sheep grazing to keep the grass down." She said she had been "in farming" all her life, that she was an experienced lecturer and could do that job required.

Miss Baker brought case after consulting the Equal Opportunities Commission, which has supplied with details of job advertisements she thought an infringement of sex equality legislation.

The hearing was adjourned.

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Which tree is Newtonian? Dr Richard Keesing knows

# This'll give 'em the pip

by Clive Cookson
science correspondent

The tree that bore the apple whose fall inspired Newton's theory of gravitation lives on in the grounds of his old home in Lincolnshire, Woolsthorpe Manor.

Since the spring, Dr Richard Keesing, a York University physics lecturer, has taken time off from his research to investigate the fate of the legendary tree. After sifting through much documentary evidence, he has concluded, provisionally at least, that the suitably gnarled specimen above is the genuine article.

The original tree blew down in a storm around 1818, Dr Keesing believes. Its trunk was removed and made into a chair by Edmund Turnor, whose family bought Woolsthorpe after Newton's death. But the tree rose again from the stump, though it is sadly too old now to bear fruit (which would be large green cookers of the old English variety Flower of Kent).

Dr Keesing doubts the authenticity of a rival tree at Belton Park eight miles away, which is said to have been grafted from the original. Over the past 40 years cuttings from it have been propagated at East Malling Fruit Research Station and at Kew Gardens, and sent round the world as offsprings of the original Newtonian tree. Dr Keesing is pictured, inset, beside one of them.

He does not doubt the original story that a falling apple set Isaac Newton thinking about gravity in 1665.

There is strong evidence that the episode took place at Woolsthorpe and evidence, too, that only one apple tree was growing in the garden then, which leaves no room for confusion.

# More powers for poly governors planned by Oakes

by Judith Judd

Stronger and better defined powers for governing bodies of polytechnics and colleges, especially in staff appointments, have been recommended in an unpublished report by a working group of the Oakes Committee investigating the management of higher education.

The group, which has been looking at management problems at local level under the chairmanship of Cllr M. G. Venn, chairman of the standing conference of regional advisory councils for further education, wants more autonomy for governing bodies because, it says, they are often ground between the local authority and academic board.

They should have, for example, the greatest possible freedom in appointments, purchases and contracts, and local authorities, which at present insist on relatively detailed prescriptions of staff, should be more flexible.

The report sees two problems. First, the need of local authorities to retain some control over these areas for financial reasons, and, second, the difficulties of a system based on a global sum calculated by average unit costs.

However, it expects the problems to be lessened by the involvement of a proposed national body for colleges and polytechnics, which it assumes will be set up.

This body, recommended in another unpublished report, has caused deep dissension in the committee. The local authorities have resisted the plan, which has considerable support in the polytechnics. The Association of Metropolitan Authorities is preparing its own scheme, though the report would not involve the wholesale takeover of colleges implied in some newspaper reports.

In return for greater autonomy the report suggests that colleges should submit to overall financial controls which might well be tougher than the present ones.

Funding between the authority and the institution should be based on a "closed budget" within which the institution must operate.

The suggested national body would analyse supply and demand in the maintained sector, advise the secretary of state on policy, allocate funds for running costs and control capital expenditure. It would also have a role in relation to the direct grant and voluntary colleges and is seen as a way out of some of the difficulties which have beset mergers of voluntary colleges with those controlled by local authorities.

Mr Oakes, minister of state for higher education, said last week that all options were still open to the committee but the proposal must have considerable support to have won the backing of the working party.

The report emphasises that the proposed 24-member body would have important differences from the University Grants Committee. It would have to be more flexible in its approach to control and the financial and administrative participation of the local authorities would be fundamental.

The working party is not proposing a general transfer of institutions from local to national control. However, it believes there could be benefits if, over time, some large complex institutions, including direct grant and voluntary, became more directly the responsibility of the national body. But this should be an evolutionary process and depend on agreement with the local authority.

On the knotty question of how and if institutions should be divided for funding the report want all to be treated equally however small or great their share of higher education. All should be embraced in the same management system, which should be flexible.

The working party wants the full committee to decide how local authority and national finance might be combined. It suggests it should be done either by the provision of, say 25 per cent of the money by the local authority and the rest from a direct Government grant, or by a combination of individual local authority finance and a modified form of the present pooling system.

# 'Hold up policy studies centre'

Four major independent institutes have jointly asked the Social Science Research Council to reconsider £5m plans for a new policy analysis body.

Mr Derek Robinson, chairman of SSRC, this week received a letter signed by the directors and governing councils of the National Institute for Economic and Social Research, the Royal Institute of International Affairs at Chatham House, the Centre for Studies in Social Policy, and Political and Economic Planning.

It urged no further moves at least until the independent bodies had been consulted and the possibilities of a scheme linking them and the SSRC investigated.

During the past month the independent bodies have been provoked into coming together. PEP and the Centre for Studies in Social Policy have plans to cooperate on research and NIESR plans to expand its new series of economic conferences to take in the interests of the other bodies. The proposal now being made to the SSRC mentions administrative cooperation and shared libraries.

# Marxist infiltration claims decried

by David Walker

Fears of a witch-hunt against Marxist academics were raised this week in the wake of a report on [illegible] college social science departments.

A spokesman for the Association of University Teachers criticized the report. The *Attack on Higher Education* published by the Institute for the Study of Conflict. "Listing people, as the report does, who simply attend meetings is pretty dangerous."

He added that the academic study group which advised the author, Professor Julius Gould of Nottingham University, were an isolated group "with a bee in their bonnet" and no backing among university teachers at large.

The report claims Marxist and radical "penetration" of university departments. Professor Gould describes tactics of intellectual subversion in sociology, literary criticism and social work and criminology. He gives a full list of participants at the recent Communist University of London and identifies academics who belong to far Left political groupings.

Professor Gould says the Marxists are a network, working together to manage academic appointments. "They depend for their influence in education upon their skill at exploiting the ambivalence of others—especially of administrators or of colleagues."

[illegible] fration includes [illegible] and the written statements of individual academics.

Dr Michael Young of the London University Institute of Education, has called the selection of evidence "highly tendentious".

The report includes an appendix on the British Communist Party, listing its various publications and educational activities.

Yesterday a meeting of the executive committee of the Campaign for Academic Freedom and Democracy drew up a rebuttal of allegation that radicals and extremists had established a "bridgehead of illiberalism" within higher education.

Professor John Griffiths of the leading figure in CAFD, said: "This report seems to reflect a revival in the sort of anti-left attack we first saw in the late 1960s and early 1970s. I am a bit surprised the authors should have thought it necessary. The evidence of recent years is surely that the Left has been brought firmly under control."

A colleague in CAFD, Mr Anthony Arblaster of Sheffield University, added that the academic atmosphere was likely to be very unpleasantly coloured by the report. "Professor Gould has unfortunately contributed to the destruction of the atmosphere of tolerance which a [illegible] scientific opinion needs to flourish."

Earlier in the week, however, the report received a warm commendation from one of the most senior figures in higher education, Lord Robbins of the London School of Economics. The report was "a splendid example of the sort of argument and persuasion" for use in the fight to sustain free inquiry.

Lord Robbins focussed on the intellectual errors of the Marxists. They were guilty of a "preposterous historical relativism" and an "ineradicable simplification of sociological issues", he said.

The Institute for the Study of Conflict is an independent body with a wide list of publications in the field of international relations. Its director, Mr Brian Crozier, said at a press conference this week that less attention had been paid to the fascist than the Marxist threat to freedom because the former had been less important until recently.

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**The THES**

We regret that The Times Higher Education Supplement was not published last week because of industrial difficulties. This week's issue of The THES has also been reduced in size for the same reason. Classified advertising appears in the middle of the paper and starts on page 9. We apologize for the inconvenience caused to our readers and advertisers. We also apologize for the misprints in this week's issue, which are due to continuing problems in the reading room.

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# Pressure put on SSRC to take initiatives

by David Walker

A member of the Social Science Research Council spoke last week of "strong Government pressure" on the SSRC to take initiatives in policy-oriented research. But, he added, the SSRC sometimes rejected Government suggestions.

Professor Jack Wrigley of Reading University, a member of council and chairman of the SSRC's educational research board, as talking to the annual meeting of the British Educational Research Association in Nottingham. He revealed that the SSRC is planning new initiatives on accountability and assessment in education, on the impact of research, on adolescence, and on handicapped children.

He said: "Clearly there is Government pressure on the research councils for them to adopt the initiative mode. But members of the educational research board have been sceptical about taking big initiatives. We have had successes, but initiatives are often difficult to carry through."

The SSRC is organizing a major seminar on the theme of accountability and assessment in Cambridge. Professor Tony Becher, of Sussex, has invited a number of scholars as researchers to discuss what sort of project the SSRC might finance.

Professor Wrigley assured his audience that the report in a recent SSRC *Newsletter* about money for educational research was "unduly gloomy". There were, he said, an increasing number of proposals for research and a decreasing amount of cash, but there was still money available for good work.

Members of the BERA told Professor Wrigley of their concern over some aspects of the SSRC's operations. Did the officials have too much power? How did the SSRC define "centres of excellence" when it distributed money for postgraduate awards?

Professor Wrigley said a centre of excellence was a university course that came at the top of the list by dint of its research effort, the staff available for supervising students, its promise, and its record.

The staff of the SSRC had some influence in choosing referees for research grant applications and in the selection of members of the educational research board. On their behalf Mr Glyn Davies, secretary of the board, told the BERA that his job was to ensure a geographical, institutional and subject spread among academics involved in the SSRC's work.

"Cosmetic Study 1969-73"—one of the artworks currently on show at an exhibition entitled "The Treasures of Whitworth" at the Whitworth Gallery, Manchester University, staged to celebrate the Queen's Silver Jubilee.

# Science will not be a special case

by Clive Cookson
science correspondent

The Government has officially rejected the recommendations of a Commons Select Committee on Science and Technology on engineering and science manpower treatment in higher education.

There will be no extra grants for applied science and engineering students, no earmarking of additional funds for science and engineering by the University Grants Committee, no designation of Special Institutions for Scientific and Technological Education and Research (SISTERS), and no new research minister within the Department of Education and Science.

A White Paper published today by the DES and Department of Industry as a formal reply to last year's Select Committee report on university-industry relations, and two initiatives announced there "will be a much more economical and effective way of attracting more students than the payment of higher maintenance grants to all students following courses in engineering and applied sciences".

These are the decisions to the employers to pay students up to £500 a year without affecting the grants, and the Government's industrial scholarship scheme details of which still have not been announced.

At a press conference on the White Paper last week, Mr Gordon Oakes, Minister of State for higher education, denied that the scholarship scheme was being held up by lack of enthusiasm on the part of British industry. He said about 300 awards, financed jointly by Government and industry, would be made in autumn 1978, and the number would rise in future years.

The White Paper notes that the latest UCCA figures show a trend towards technology and applied science courses, for which there have been 21,750 applications for entry this year—13.9 per cent more than a year ago.

"As a result of these encouraging trends the empty places in science and technology departments which have caused much public comment are disappearing. An increase of annual admissions of about 4,000 over the next two or three years should be sufficient to fill those which remain. The Government believes the main problem for the institutions now is to attract a greater proportion of students of high ability and motivation. There are obviously some signs that they are succeeding in doing so."

The SISTERS concept has already been exhaustively examined and rejected, the report says. The designate institutions as SISTERS would restrict them to training and research in engineering and the applied sciences would have the effect of isolating their activities from other disciplines at a time when the policy in other spheres, for example medical education, teacher training and management studies, is to move in precisely the opposite direction.

"The Government believes that the Committee's aim of strengthening engineering education, with which it is in full sympathy, is much more likely to be achieved in existing multi-faculty institutions".

The appointment of a separate Minister of State for Science and Technology is unnecessary, the Government feels, because the field is already being looked after satisfactorily by the Secretary of State and her junior ministers.

# Call for cut in examining boards

A drastic reduction in the number of A level syllabuses and examination boards is one of the main recommendations of a Commons committee examining the examinations of school leavers.

The education, arts and Home Office sub-committee of the House of Commons Expenditure Committee of the House of Commons Expenditure Committee also calls for the earmarking of specific grants for in-service training for teachers, and for a Bullock-style inquiry into the teaching of mathematics.

On examinations, the committee says: "There seems to be a strong case for fewer examining boards than the present 22, and for these to be regionally based, a system which already appears to work satisfactorily in Wales".

Boards should also strive to ensure that standards be kept as similar as possible between the various boards, subjects, and from one year to the next.

The committee recommends that examining boards should improve communications with parents, employers and people in higher education about the meaning of various grades and the content of syllabuses, especially in the case of Mode 2 and Mode 3 of the CSE.

It also wants a reduction in the number of syllabuses offered in those areas, like mathematics, where there has been proliferation.

Universities and polytechnics are asked to give priority to identifying mathematical skills which appear to be a basic necessity for someone starting a degree in mathematics, engineering, or the physical sciences.

The committee's report records the complaints of many in higher education about the need for remedial work with first-year students.

It was told of the need to distinguish between students who had an inadequate grasp of basic mathematics and those who had competently mastered a syllabus which was very different from that being done in the first year of university work. The committee concludes: "Serious erosion of first-year time occurs . . . and the standard of written and oral competence and study skills is sometimes not sufficient to sustain degree level work.

"Unless attention is given to these vital areas the very existence of a three-year degree course, already shorter and more intensive than in many countries, may be under threat."

The National Union of Students has welcomed the report and expressed a hope that "the streamlining of the examination system would bring an end to the baleful influence of the universities over the school curriculum."

# ICED study

We have been asked to point out that the unpublished study *Purposes, Policies and Prospects* by Professors Tony Becher and Maurice Kogan and Mr Ian Embling for the International Council for Educational Development, New York, reported in *The Times* on September 5, was a first draft only. Some of the passages quoted in our report and the leader which accompanied it may not appear in the final version.


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# Don's diary

## Tuesday

The Pugwash conferences on science and world affairs are due to celebrate their twentieth anniversary this year. Following the issuing of the Russell-Einstein manifesto alerting the world and scientists in particular to the threat of nuclear war, 22 people met at the village of Pugwash, Nova Scotia, in July 1957.

Today about 240 individuals, expert in a wide range of natural and social sciences, are converging on Munich as the guests of their colleagues in the Federal Republic of Germany. This is actually the 25th conference and as one of a sequence of larger quinquennial meetings will consider the policy and programme of the movements over the next five years.

Participants from the British Group of whom there are 20 in all, including the International president, Professor Dorothy Hodgkin OM and the former secretary general, Professor Joseph Rotblat, have somehow to get away from Heathrow airport in the face of the confusion created by the air traffic control assistants.

The promise made by the check-in girl in London that "my colleagues in Stuttgart will look after you in any case" is well borne out. On arrival we are whisked by car to the Hotel Bayerischer Hof where the conference is to take place and most of us will stay.

Almost immediately, however, there is a mild undercurrent of criticism primarily from those who would be the first to complain if the reverse were true. There is, they claim, with some reliability something incongruous if not improper in meeting to discuss the world's major ills, especially poverty and starvation, in luxurious surroundings: this is a perennial debate which was highlighted when we met in India.

The elegant Taj Coromandel Hotel in Madras did contrast directly with the conditions of the people in that city, but what else could the conference organizers do there in the circumstances with their foreign visitors?

Typically, perhaps only the British at the last quinquennial conference in Oxford have been able to solve the problem of combining the prerogations with the physically rigorous by housing some of their guests in the older undergraduate rooms at Christ Church.

Ritual objections largely over, we settle at an informal reception to renewing old friendships and making for sub-diplomatic discussions.

## Wednesday

The conference begins at 09.30 hours with a piano recital by Hepzibah Menuhin, who with her husband, Richard Hauser, attends most of the conference. The official opening follows with a speech by Hans Matthöfer, the federal Minister for Research and Technology, deputizing for the Chancellor, Helmut Schmidt who is unfortunately unable to come.

I do not think I have ever heard a speech so well judged for the occasion: "Scientists", said the Minister, "must, whether they like or not, cross their own borders and deal with the political and economic mechanisms and institutions on which depend the extent to which the theoretical knowledge accumulated is utilized and practised".

He is under no illusions about the difficulties and appeals to scientists to understand social processes generally and especially the social realities internal to developing countries. Peace is not a simple or a single concept: should it be defined as the absence of the use of force or the absence of social injustice?

In the afternoon the working groups begin: I am co-convener with a Swiss with whom I am already on friendly terms and a Swedish expert on chemical warfare who will arrive later from a UN disarmament committee in Geneva. This reminds us of the character of Pugwash as a forum for sub-diplomatic discussions.

Vassily Soludovnikov, now Soviet ambassador to Zambia, has also been to Pugwash on at least three occasions. Henry Kissinger was a regular attender in the 1960s. The working group on "Arms Control and Disarmament in the Non-Nuclear Realm" this time includes a Soviet historian of Britain, a retired German general who now directs a peace research institute, physicists, lawyers, political scientists, sociologists and doctors and welcomes an observer from the Stockholm International Peace Research Institute (SIPRI).

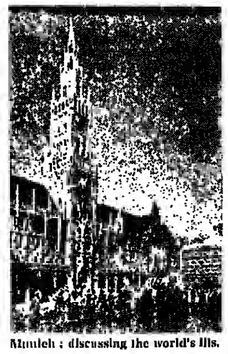
We debate the agenda outlined for us by the Pugwash Council and decide to use as a working paper, which I have drafted, as a basis for considering new or unremunerated ideas which might help make more productive the special session on disarmament of the UN general assembly scheduled for next May.

In the evening we are entertained by the Prime Minister of Bavaria at the Residenz.

## Thursday

Seven hours of detailed discussions in the group, of which I chair, has not during a joint session on the neutron bomb. This new weapon in the nuclear spectrum is regarded with particular abhorrence by some on humanitarian grounds. We try to get behind the emotional reaction to another nasty device and are warned by some of our colleagues against exaggerating its special genetic effects.

We come to the conclusion that it is particularly objectionable because it emphasizes what several participants describe as "war-fighting capacity" rather than deterrence or the preservation of peace. It clearly endangers progress towards a comprehensive test ban treaty, which recently seemed rosy, would increase pressures for



Mitnich: discussing the world's ills.

nuclear proliferation and lowers the threshold for the use of a nuclear weapon.

## Friday

In the morning we endeavour to bring the working group to some conclusions which can be reported. This proves easier than seemed likely to begin with because a pattern of argument has been firmly established—arms control measures have a limited usefulness and can even be counterproductive, it is time to take a fresh look at the possibility of substantial force and armament reductions, including unilateral initiatives.

The incentive to finish discussion and a first draft of the report in time for lunch is the promise of an enjoyable excursion to the largest lake in Bavaria, Chiemsee. A short coach ride mostly on the Munich-Salzburg autobahn provides an opportunity to consider the taxonomy of conference excursions.

Time also for the informal debates which we always hope further international appreciation. I could not help being struck by the rational appreciation, especially by younger German academics, of the current problems of Britain. Was this, I thought, simply the politeness of hosts to a guest?

Then I discovered quite incidentally the weight which may of them attach to Rolf Dahrendorf's symptheic model of a British people beginning, perhaps successfully, to tackle economic and social ills which threaten to debilitate society, and could eventually engulf some of them. This kind of link between two leadership elites suddenly assumed a new importance.

## Saturday

Debate on the working group's draft reported produced a thing but improvement. This year to an even greater extent than of the last two or three conferences the old sterile East-West argument seems to have paled to insignificance. The Vienna force reduction talks may effectively be deadlocked, but at least, it is argued, they have served a purpose of mutual education in the strength and nature of each other's fears.

In the afternoon I present the group report to the plenary session. Comments focus on the strength or weakness of one statement about the neutron bomb, which we have included because of its implication for disarmament generally. Our comments on the problems of the conversion of industry from military to civil purposes, informed by a proknowledge of a forthcoming United Nations report on the economic and social consequences of the arms race, go largely unremarked at this stage.

This confirms the view held by many regular participants at Pugwash conferences that, with rare exceptions, it is not the report but the discussions which preceded it that matter. We shall, however, take up and include in the report a suggestion that all governments should set up study groups on disarmament to prepare for the special session of the United Nations general assembly.

This evening the Max-Planck-Gesellschaft entertains, as before dinner. During it, Mrs Cyrus Eaton who, with her husband, hosted the original Pugwash meeting in 1957 speaks and plays a tape of Bertrand Russell which unfortunately is largely unintelligible.

## Sunday

We are now in the thrall of plenary sessions mainly about the future; but first we hear the remainder of the reports. It now appears that reports of South Africa's nuclear capability have caused a change of heart in one respect. Previously in spite of suggestions for encouraging economic and other pressures on South Africa, all contacts with that country by Pugwash have been resisted. Now, ironically, the possibility of a nuclear explosion, officially denied, seems to be leading towards a meeting between Pugwash scientists and their opposite numbers in South Africa. One or two of us with knowledge of the politics of Southern Africa may be asked to help.

This issue, and the reported licence by a West German firm to develop small rockets in Zaire, serve to highlight the crucial link between disarmament and development which is the core of the Pugwash movement's own internal controversy.

Tonight we had a public presentation by seven speakers on "Scientists and Problems of Peace". Lord Noel-Baker with his own passionate brand of oratory and unique interpretation of the history of disarmament negotiations stole the show, but not before we had had time to appreciate Carl-Friedrich von Weizsäcker's sober assessment of the chances of avoiding nuclear war, and a brief but refreshing contribution from Angel Dolovski, president of the Bulgarian Academy of Sciences.

## Monday

The conference closes at midday. I depart in a mood of relative optimism, not because I have just been elected one of the two British representatives on the Pugwash council, but because, though exhausted by its intensity, I have enjoyed this conference as much as any and feel that some of the more rigid barriers to international understanding are beginning to yield.

**William Gutteridge**

*The author is professor of complementary studies at Aston University.*

# Crystal ball gazing and after

Bryan Davies

Adapting Aneurin Bevan's well known aphorism "why gaze into the crystal ball when one can listen to the TUC in conference" brings the confident prediction that the key issue of 1978 will be the pay claim. Education unions may not mobilize the industrial clout of the larger and more strategically significant forces present elsewhere in the economy but the next academic year promises some fairly sharp debates.

The Association of University Teachers considers itself to have been as unfortunate a victim of the axe land and already the first rumblings on the campus threaten to emanate this year from staff not students. Before the battle lines are drawn on this conflict, however, it is to be hoped that a full stock will be taken of the major issues to this past year.

There can be little doubt that, as far as education ministers are concerned, their most controversial action in further and higher education was the raising of student fees. The bitter harvest of this decision is, of course, only now being gathered in as students enrol for the coming term.

Needless to say the absence of any clear direction from the Department of Education and Science ensures that the educational world responds to the pressures of the new constraints in a piecemeal and unpredictable fashion.

Universities undoubtedly will succeed best in protecting students midway through their course by the use of extra government support for hardship funds and their greater ability to juggle their own resources. Polytechnics will be at the mercy of their respective education authorities, many of whom in the past year having displayed limited sympathy for the problems consequent upon fee rises.

Even more vulnerable is the further education sector where the claims of overseas students are in even starker competition with home students at the local college.

Yet the chaos and disruption over fees, reflecting in some cases a major injustice to students entering the later stages of their courses, represents only one facet of the increasing difficulties confronting overseas students in this country.

Indeed, so the United Kingdom Council for Overseas Student Affairs has recently pointed out, the only policies which have emerged from Whitehall in recent years have been ones of increased restriction and control, leading to a marked deterioration in the climate for overseas students.

In areas where government has sought to be constructive along lines which have won widespread support there exists doubt on the effectiveness of government strategy. The praiseworthy attempts of the Overseas Development Ministry to give substance to their declared aims of directing more aid to the poorest in the Third World appear to make only limited impact in the field of education.

Despite the fact that historically a major element of United Kingdom support to the Third World, especially Commonwealth countries, takes the form of access to our educational facilities, the ODM's capacity for establishing their priorities appears severely limited.

It can and does of course exercise discrimination on the students and courses it intends to support. Nevertheless, since the emergence of the new aid priorities, there has been little drive from the ODM to establish a fresh evaluation of the appropriateness of many courses on offer in further and higher education. Moreover its own limited resources for educational support threaten to be swamped by the fees increase.

The government justification for the decision has, of course, been expressed almost solely in terms of public expenditure constraints. It is not my purpose in this article to consider the validity of that general argument. It should, however, be a matter of gravest concern to Labour ministers that they have been trapped by the intensity of the crisis into short run and ill-considered expedients.

There ought to be greater appreciation of the fact that the crisis reveals the necessity for a more coherent policy for the future. The only concession made thus far is a hint of withdrawal from the expressed intention to increase fees further next year.

To their great credit, several of the pressure groups in the field of overseas student welfare are responding in a much more constructive fashion. As reported in *The THES* several weeks ago, the UKOSA and the Council for Education in the Commonwealth are developing a proposal for a Commission for Overseas Students.

They contend, with great justification in my view, that government policy is in its present straits not chiefly through resource constraints but through the absence of any institutional machinery to develop a longer term policy on overseas students.

Their argument is that government has given a firm indication that it is breaking with the *laissez faire* policies of the past—at least in respect of overall numbers of students—but has not the will or capacity to develop a coherent strategy for the future. Thus a commission should be established with representation for all the major interests concerned with the education of overseas students to provide a basis for future policy.

The concept is, of course, by no means a novel one. The House of Commons Select Committee on Expenditure examining policy formulation in the DES last year recommended a standing commission to consider long-terms educational issues. Whilst other more minor recommendations of the committee were accepted by the government with commendable promptness, the concept of the commission was rejected in fairly forthright terms.

And such a commission been created, however, the issue of overseas students could now be under consideration by a body committed to evolving a long term policy. Perhaps the select committee was being excessively optimistic in linking such a radical solution to educational policy formulation.

The UKOSA proposals embrace the same concept but in a restricted area of policy. The commission could hope to develop an overall strategy in a field where several government departments have fingers in the pie.

In addition to proposals on the number of places which British education should offer to students from overseas, an attempt could be made at deciding on the most equitable distribution of places between the different sectors of further and higher education.

The educational world could respond more positively to priorities identified by ODM and a more extensive public debate could develop on the nature of Third World needs in educational terms. The difficult issues of Home Office requirements on immigration control could be tackled in such a way as to minimize irksome restrictions on students.

It is clear that at present no such institutional machinery exists nor is there an adequate forum for public debate on these issues. Few of us needed the deliberations of the Government's "think tank"—although its trenchant criticism of present arrangements for educational support cannot be lightly dismissed—to recognize the urgent necessity for a more coherent policy on overseas students.

No double ministers and even more their Whitehall mandarins will deny the usefulness of such a body. They will argue that it will become merely a pressure group. Moreover, they will contend that the existing machinery is perfectly adequate.

To that proposition many of us after the experience of 1977 may be tempted to answer so *momentum requiris, circumspice*.

David Walker examines a Royal Commission findings on women's magazines

# Beyond skin cream and escapism to significance

Professor Oliver McGregor of Bedford College, London, the chairman of the Royal Commission on the Press has set sociologists to work analysing the papers and magazines we read.

Last week the latest commission review appeared. It is a description of women's magazines by Dr Cynthia White of the City of London Polytechnic and is the first time a Royal Commission has singled out the women's press as a separate category.

Women's magazines may be, as Dr White's survey of their content shows, still bound up with homes and families, but note has to be taken of their growing social significance. The fact that the Royal Commission has bothered with them "represents something of an accolade for those who produce them".

Dr White, author of *Women's Magazines 1963-1968: A Sociological Study*, went on secondment from her position as head of the sociology unit at the polytechnic while working for the commission. She interviewed the major magazine publishing Corporation—but most of her time was spent reading *Mother*, *Mirabelle*, *Women's Own*, *Petticoat*, *She* and *Cosmopolitan*.

There is always a danger when sociologists confront ephemeral aspects of life that they become at worst prissy and at best pompous. Dr White resists the temptation during most of her study but succumbs when looking at the youthful end of the magazine market.

She says: "The magazines rather represent a counter-influence to society by reinforcing teenage fantasies and squandering teenage enthusiasm and imagination on unworthy objects, when they might be reflecting the rich opportunities open to them through learning, social services and many other routes."

For the most part, though, Dr White is neutral. Indeed her report betrays no little regard for women's magazine editors sandwiched as they are between avaricious commercial management and fickle readers.

In the late 1960s and early 1970s there was a rash of new titles and diversification in the content of the magazines. Recently, says Dr White, as innovative magazines such as Nova have folded, there has been a reversion to the world view which most magazines had in the 1960s, concentrating on home and family.

As Dr White says: "The conclusion cannot be avoided that, although there is now more scope for progressive writing in the women's press, its largest sub-group is still composed of women whose first priority is the Family, who do not actively seek wider social participation, and who are less interested in discussing the foremost social issues of our time in their magazines than they are in poring over the legion examples of common emotional problems which abound in intimate personal relationships."

Unlike some of her Marxist colleagues, Dr White does not see a conspiracy of capitalist publishers foisting agony columns upon a duped public. Some of the most interesting sections of her report, in fact, concern publishers' new attitudes in recent years.

She says the "lowest-common denominator" approach to women's publishing has been undermined. The mass market has been steadily crumbling in recent years under the pressure of social and economic changes.

"Accordingly, the women's magazines have been at pains to develop separate and distinct 'pictures of the world' which they hope will find acceptance amongst like-minded people. Their editorial concepts match the attitude groups thought to exist within the female population and run the whole gamut from the 'traditional domestic' to the 'progressive-involved'.

"Thus Woman's Weekly's readership no longer represents the 'mass market' in women's journalism, but a massive sub-group within it, alongside which other sub-groups of varying size and characteristics are now ranged."

Few weeklies are "progressive". D. C. Thomson of Dundee still successfully produces journals of unexceptional fiction. There is not much heaving and panting explicitness to be found in People's Friend, Red Letter or Secrets.

Dr White records a substantial increase in the demand for women's fiction in the 1970s. Not only have several new titles been launched but fiction has held its place in the general magazines.

Fashion papers have had a more chequered history. Typical was the decision in 1971 of the National Magazine Company to amalgamate Queen and Harper's Bazaar. Part of the problem is the growing diversity of "fashion" itself, the concept of Vogue and the tyranny of the couturiers mean little to most readers.

Dr White is critical of magazines aimed at younger women and girls, referring to restricted range of content and superficiality. There are few searching features and not much well-written English, she says.

"The advertisements in Jackie, Mirabelle and Fab 208 show where the real interest lies. The kids who read them will wangle money out of dad, or spend a whole first pay packet in any hour—so it is cleansing lotion, spot cleaners, hair preparations, and any number of products designed to cope with that (shh) awful monthly problem. The advertising trades on pubescent insecurity—like the articles."

Dr White speculates about the influence of the size of the publishing organization. D. C. Thomson gets good marks because as a small, family firm there is easy access to top management.

She quotes an IPC employee to the effect that the accountants are getting more and more powerful, the creators less so. At IPC the market researchers are powerful. The advertisers of beauty products, clothes and baby products are influential in all the magazines.

Nonetheless Dr White concludes her study with a fair degree of respect for the journalists and their ability to resist undue commercial pressures. It remains that women's magazines, most of which are produced by IPC, do perform an "irreplaceable and vital social welfare service."

"Not only do they enhance the personal well-being of millions of individuals, but also they make a significant contribution to raising standards of family care, not least in the area of nutrition and health. For a few pence, women in a variety of situations and with widely divergent needs can call upon expert help of a kind, and in a manner, provided nowhere else. Equally they can find amusement, diversion and escape."

The inclusion of women's magazines in the work of the Royal Commissions is seen by Dr White as a feather in the editors' caps. As she says magazines have become more socially important, so society—or rather the sociologist as society's proxy—has to monitor their performance.

Sue Reid reports on a National Union of Student's paper on teacher supply

# New look at strategies to alleviate teacher unemployment

The National Union of Students has released a new strategy paper which attempts to assess the educational argument for an expansion in teacher supply and examines the Government's plans to alleviate the growing threat of massive teacher unemployment.

The document, released to coincide with the union's teacher education conference in Edinburgh, suggests that Britain's students should launch a political campaign aimed at raising the demand for full teacher employment in the context of school and post-16 education needs.

It claims: "The ability of student unions to become directly involved with community interests in defining educational needs will have a major impact on the effectiveness of our strategy for increasing teacher supply."

"Time and again in recent years the Department of Education and Science has sought to justify their policies in terms of the Government's central political commitment to public expenditure cutbacks and over the next year the impact of the cuts will become more severe as the Government seeks to implement cuts totalling £1,034m throughout the social services."

The NUS goes on to warn that "32 per cent of these cuts are due to a fall in education spending. Therefore, the strategy of halting and reversing these cuts in the different sectors of education must be seen as part of a broader attempt to reverse all cuts in social services spending."

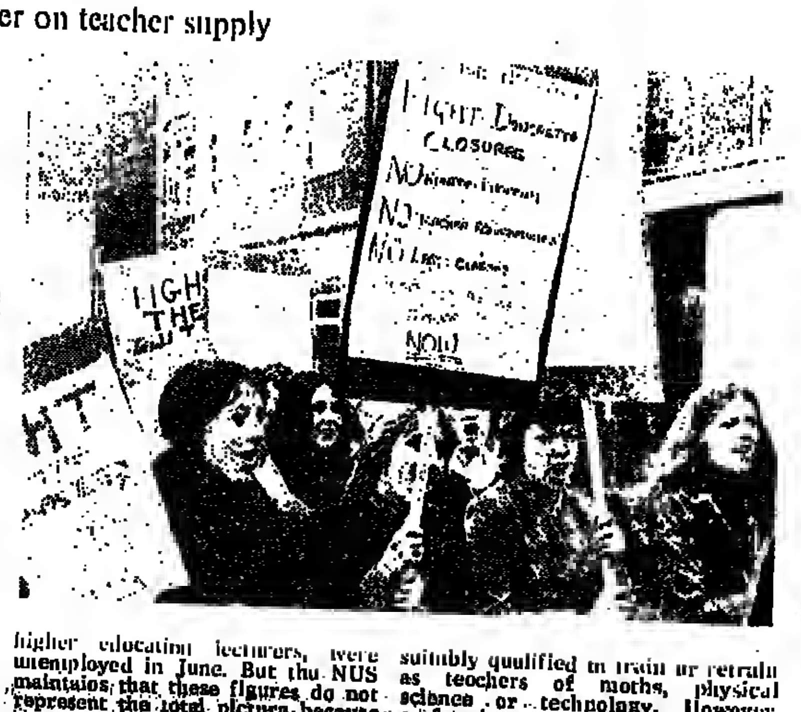
Recalling the history of the growth in teacher unemployment the document says that 1975 was the year when this problem became a public issue. That year, it claims, 3,000 newly qualified teachers were unable to find teaching jobs and a similar number of reentrants, predominantly married women returners, also failed to gain posts.

"It was not until the summer of 1976 that the rising level of teacher unemployment received major public attention. That year, 5,000 reentrants and 14,000 newly qualified teachers were unable to find teaching posts."

The strategy document adds: "This year we estimate that a further 5,000 teachers will be seeking to return to the profession and of the 36,500 newly qualified teachers at least 15,000 will not secure employment but would have done so in the conditions prevailing in 1973-74."

After the 1976 predictions of rising unemployment among teachers a significant number had diverted to alternative forms of training and employment. Therefore it could not be assumed that all the qualifying teachers had been seeking teaching posts. But the employment prospects of teachers were now significantly worse as a result of falling rolls, the maintenance of pupil-teacher ratios and a dropping wastage from the profession.

Department of Employment figures in August showed that 8,000 teachers, including further and higher education lecturers, were unemployed in June. But the NUS maintains that these figures do not represent the total picture because they exclude qualified teachers in temporary non-teaching work from which they might still plan to return to teaching.




The union points out: "At Easter, Shirley Williams announced a 'four-pronged attack on teacher unemployment. This is quite remarkable because the first 'prong' is potentially devastating for educational advance and the second will only have a marginal impact in the short term because of the local education authorities' inability or unwillingness to fund it."

Mrs Williams called for a reduction in teacher supply, an expansion of in-service and induction courses, the introduction of early retirement incentives for teachers over 50 and the retraining of unemployed teachers for shortage subjects.

"The retraining plan involved the payment of special grants to 1,200 mature graduates and others suitably qualified to train or retrain as teachers of maths, physical science or technology. However, so far the special tax free maintenance allowance of £45 per week plus generous dependents allowances, has only succeeded in attracting 200 applicants," the NUS alleges.

The DES, it claims, intends to make fundamental changes in both the "level" and the "pattern" of teacher training. By the early 1980s the reorganized system would provide for 30,000 students on three and four year courses and slightly upwards of 6,000 on one year postgraduate certificate of education programmes. This was expected to produce an annual output of between 14,000 and 15,000, of whom 8,000 would have followed the non-graduate entry route and 6,000 the post graduate, a ratio of 8:6 compared with one of 23:9 in 1972.

"There will be a marked shift of emphasis away from concurrent training to consecutive training. By the 1980 about 7,000 of the 8,000 teachers qualifying from three and four-year courses each year will have been trained in polytechnics or the institutes of higher education.

Three-year courses in these colleges will comprise two years of academic study followed by one year of professional training for the BEd degree and the DES estimate that 40 per cent of these students will stay on for a fourth year to attain a BEd honours", the document says.

This meant that of the 14,000 output of teachers there would be approximately 10,200 with one year of professional training, 2,800 with two years, and only 1,000 trained concurrently for three or four years.

The debate about teacher supply should now be extended to take into account the total needs of compulsory and post-school education, maintains the union. "Student activity should centre around the need to integrate provision of education and training for 16 to 19-year olds, the extension of adult education into areas of curriculum development and the growth of in-service training in all sectors of education.

"It is deplorable that the DES still ignores the long standing demand of the National Association of Teachers in Further and Higher Education members for some compulsory element of induction training. In-service training for lecturers is now an essential prerequisite to further education achieving the responsiveness and creativity that is essential if the changing educational needs of the 16 to 19-year-olds are to be met."

The document, prepared by Mr Peter Ashby, the NUS deputy president, concludes: "We must attempt to closen the relationship between those qualified and those qualifying. In particular student unions must encourage active associate membership of the National Union of Teachers by all trainee teachers and must encourage those intending to join further education to build links with the NATFHE."



# Academic valves undermined by Marxist offensive

A new study by Professor Julius Gould, professor of sociology at Nottingham University, claims that the basic values upon which the pluralist society of the United Kingdom rests are under steady and increasing attack from political extremists.

He says: "First, it is important to show how *wrong* the radicals are in what they *say*. Second, it is *important* to understand what they *do*—how, quite undemocratically, they deploy their small numbers so as to secure the maximum leverage."

Professor Gould alleges that "selected university departments have fallen squarely into radical or Marxist hands" and the extremists "rely, like any other network, upon mutual support in the making of appointments." And he says that those who direct institutions in which illiberal groups have secured a bridgehead must take some of the blame. "Had they been more aware of their responsibilities, they would have invoked normal criteria of excellence and diversity so as to secure a balance."

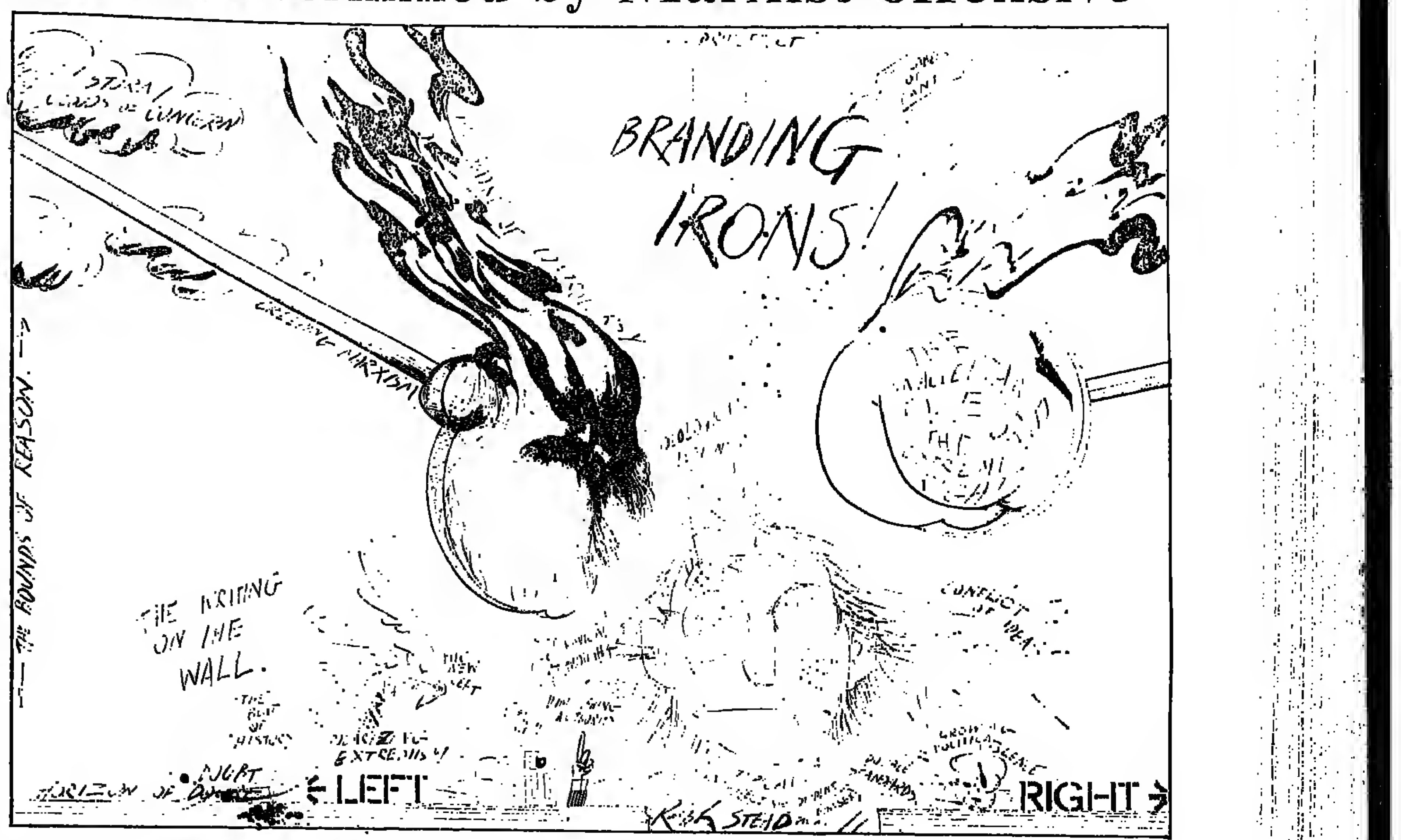
Though an appendix contains samples of university examination papers and booklists with apparent Marxist biases, Professor Gould's report contains little detailed evidence about Marxist activities. The bulk of it is an academic critique of Marxist approaches.

The radical establishment, Professor Gould argues, seeks to impose a form of unilateral cultural disarmament on its opponents. "This is part of a well-known international tactic—the 'long march through the institutions' aided, wherever possible, by the timidity of moderates prepared to practise such disarmament and by the tedium involved in dialogue with the tireless practitioners of the 'long march'." A flow of books and literature designed to undermine the values, ideas and beliefs of the established order has "cascaded" from the presses in recent years. Reputable publishers such Penguin and Macmillan, as well as fringe houses on the Left, have been prominent in publishing such material.

Professor Gould concedes that there is a respectable Marxist tradition within the scholarly community and names Christopher Hill, Master of Balliol College, Oxford, and Americans Eugene Genovese and Barrington Moore, as examples. But the approach he is concerned with is of a different provenance.

"It is diffused among teachers and students within the establishments, vastly expanded in recent years, of higher education; and it penetrates—as it is intended to do—into other important areas of the social fabric. Its exponents take full advantage of other intellectual fashions which undermine the possibility and desirability of objective knowledge—fashions which have a non-Marxist origin and flavour. But they do so, at varying levels of crudeness and subtlety, in the service of cultural and political ends which are Marxist and which, to put it mildly, are 'taken for granted'.

"Here we find a quite different mode of thought and teaching. We encounter a more dogmatic attitude to knowledge drawn from the acceptance of certain a priori assumptions associated with a Marxist world-view. We encounter a clear commitment to the use of education for politicizing activities—activities directed at producing irreversible changes in the social order. We find a confident, aggressive intolerant style of writing and teaching—a style which borrows, where it seems tactically prudent, from certain procedures of scholarly work, but which also stresses the iniquity of 'bourgeois' modes of thought or insists that there is no world of facts independent of context or of theories which purport to give meaning to those facts."




Steadman's all purpose rent-a-label cartoon penetration exercise.

Professor Gould describes various intellectual tactics that are employed to advance the radical position. These include:—

● The tactic of generalization—"positive version".

This tactic "begins with a valid insight or partial truth, such as is found in the writings of liberals and conservatives, then puts it into a setting, which results in a false statement". For example, in the study and treatment of mental illness, Marxists have generalized the growing insights into the social causes of mental illness so that it is implied that the whole structure of a capitalist society is rotten and perverse and liable to send anybody mad. Thus, working class people are the largest single group committed to mental hospitals, therefore mental hospitals are class-based institutions. And, to quote one Marxist writer, "mental illness is simply a product of bourgeois propaganda".

● The tactic of generalization—"negative version".

This tactic "picks on some—possibly valid—criticism of one particular proposition and then alleges that the same criticism applies to the entire position of the adversary".

● The all-or-none tactic.

This tactic involves cutting out the middle ground "and imposing a premature and unnecessary choice between alternatives". Thus, the recognition that there are real problems of value bias in the social sciences becomes a claim that attempts to achieve a value free approach are hopeless and that single-minded ideology is the only answer.

● The tactic of pre-empting.

This involves creating framework for discussion "in which Marxist assumptions, being introduced at the outset, most inevitably predominate and underpin the ensuing analysis". For example, a study may be defined as "a critique of capitalism". Explanations in terms of "class conflict", "false consciousness", "imperialism", and so on then became logical and plausible.

● The tactic which ignores the total nature of man and the context of human life.

This involves the unquestioned assumption that the only valid explanations of human behaviour are social explanations. Genetic, biochemical or other physiological explanations of human behaviour are dismissed, frequently in emotive or derogatory terms, without an adequate critical analysis.

● The tactic of the non-use or comparative analysis.

"The overriding aim of this tactic", Professor Gould writes, "is to establish the impression that all the problems of 'Western' societies (and, on a different level, those of many 'Third World' countries) are attributable to the characteristics of capitalism and its associated social and political institution, such as liberal democracy. The implication is that the destruction of capitalism and its replacement by Marxist forms of socialism will result in the alleviation and eventual abolition of all social and personal problems."

It may be claimed, for example, that suicide, drug addiction, alcoholism, crime and mental illness are all attributable to capitalism, but there is no attempt to establish whether such phenomena are more, less or equally frequent in non-capitalist societies. Or it is alleged, again without adequate assessment, that all existing societies are merely variants of capitalism.

"The fundamental sociological and political questions—relating to comparative analysis of parallel social phenomena in different socio-political contexts—are left unasked: consequently, students may be lulled into simplistic acceptance of the interpretation that the destruction of capitalism and associated institutions of liberal democracy will, *per se*, resolve the problems and inequities so carefully portrayed."

● The tactic of the double standard.

This tactic involves dismissing all other intellectual positions because they are determined by social and historical influences. Only Marxism somehow transcends this determinism and achieves truth.

● The tactic of confusion and mystification.

"There appears to be a deliberate adoption of tactics of mystification and confusion. They may take the form of writing in a style so opaque, so jargon-laden and verbose, that the reader finds it difficult to apply his critical faculties; any attempt to do so tends to promote bewilderment. Consequently, it is easier to adopt a policy of 'just' reading the work and imbibing it uncritically. In this way, the totality of the work may be ingested, and any inconsistencies or other forms of intellectual shoddiness may pass unheeded."

Professor Gould gives examples of the influences of Marxist approaches in several subject areas and quotes from such magazines as Radical Philosophy and Further Left. But Marxist influences, he says, have probably been most extensive in social work and teacher education. In both these areas, extremist ideas have been "pressed into practical service". Professor Gould states: "There has been an explicit drive to mould the education of social work students, to influence their political beliefs and associated attitudes to social work practice, before they enter the field."

He accuses radicals of cashing in on confusion about the future of British society and about the kind of values that should be fostered by education. "They claim that, for example, 'traditional values' (including a decent respect for legitimate authority) are not shared by workingclass children; that to teach the English classics (such as Shakespeare) to such children is irrelevant to their needs; that the "competitive ethic" should be replaced by a 'cooperative ethic' more appropriate to the outlook of such children; that to work in industry is service to capitalism; that teachers who adhere to 'competitive' values must mend their ways or be replaced by those whose ways are 'superior'."

These intellectual influences, argues Professor Gould, "are of greater and more continuing importance than the violent and often brutal excitements which many universities encountered in the late 1960s". The radical minorities have been "adept at building up, using and diverting for their own ends, a variety of front organizations".

Professor Gould names the British Society for Social Responsibility in Science and the Council for Academic Freedom and Democracy as examples. He goes on: "The tendency for radicals to invent or infiltrate pressure groups and distort this year's (or next year's) 'good cause' is a well established one. It is only remarkable that each successive essay in distortion, or in the service of a 'popular front' finds a new supply of gullible customers—and can rely upon a fund of goodwill from those who stand, and smile, at the periphery."

The report by Professor Gould is the outcome of deliberations by a study group which met from November 1975 until earlier this year. Regular members of the group, which discussed "the penetration of extremist minorities and ideas in education and its effect on the liberal values of a pluralist society" were:

Mrs Caroline Cox, Chelsea College, London University.

Professor Antony Flew, department of philosophy, Reading University.

Professor David Martin, department of sociology, the London School of Economics and Political Science.

Kenneth R. Minogue, department of Government, LSE.

Professor Edward Shils, Fellow of Peterhouse, Cambridge and professor of sociology, Chicago University.

Dr K. W. Watkins, department of political theory, Sheffield University.

Brian Crozier, Director, Institute fo rthe Study of Conflict.

Iain Hamilton, Director of Studies, ISC, at the time the group met.

Michael Goodwin, administrative director, ISC.

Also consulted were Professor the Lord Vaizey, of Brunel University; Dr Rhodes Boyson, a Conservative spokesman on education and Dr Stephen Haseler, of the City of London Polytechnic.

*The Attack on Higher Education*, by Julius Gould. Report of a study group of the Institute for the Study of Conflict. (ISC, 12/12a Golden Square, London W1R 3AF, £5.)

In his presidential address to the British Association, published in full *THES* (September 2), Professor Sir Andrew Huxley criticized those who bring politics into science. In reply, Robert Young argues that scientific facts can never be separated from political values

# Can we really distinguish fact from value in science?

Professor Andrew Huxley's presidential address to the British Association (THES, September 2, 1977) has raised—both in what it says and what it leaves out—a number of fundamental issues about science in modern society. It must not be allowed to go unanswered, not least because neither his current nor his historical examples give an adequate representation of how science and society are related.

It is ironic, given Professor Huxley's argument, that his evidence only makes sense in the light of the political assumptions implicit in his address. He is rehearsing a familiar position, one which has been repeated both by Galileo, Hume, Mill, Popper and by the defenders of the existing arrangements against the Rothschild Green Paper "customer-contract" proposals: the independence of science.

He reviews the issue in various guises, but the central distinction between fact and value underlies them all.

A central premise of radical critiques of the bourgeois social order and its science (east and west) is that the fact-value distinction—and correlate distinctions, such as that between science and society—makes one particular set of values seem natural and inevitable by drawing the line where it does, and failing to see the issues in terms of mutual interpenetration and levels.

## *Positivist outlook*

The distinction diverts our gaze from considering the ways in which modern science expresses and serves a particular world-view and its social order; for this issue never gets on to the agenda. It is of the essence of *positivism*—the separation of events into facts on the one hand, and their contexts and evaluative relations on the other—that such questions cannot be coherently formulated within scientific discourse.

The complacency of Professor Huxley's address is dismaying. Its tone is patronizing, and its representation of serious and fundamental problems about science is a caricature. Having read most of the great Victorian presidential addresses to the British Association, it makes me very sad that the issues affecting the role of science in advanced societies can be represented in such a narrow and (in my view) ill-informed way before the very forum which exists for the purpose of informing the general public and stimulating responsible debate.

Professor Huxley's representation of the critics' views invites the tolerant smile one gives the misguided. Science is indiscriminately being made a "scapegoat" by people who think it is positively wicked to look into anything that might disagree with their social and political preconceptions or deflate their "wishful thinking".

Is *that* all that is behind protests over carcinogens, mutagenesis, teratogenesis (such as Thalidomide), fast breeder reactors, genetic engineering, XYY chromosome screening, safe and reversible contraception, free abortion on demand, Flixborough, Seveso, agribusiness, the green revolution, drug research and marketing, various forms of biological fatalism (such as sociobiology and IQ), as well as the critique of the power and career structures in science, technology and medicine?

And presumably, if it is argued that these concern the uses rather than the content of science, we have also disposed of critiques of the role of (and deference to) science and technology, and of scientific and technological rationality in the degradation of the labour process, and in various forms of scientific management and management sciences, especially socio-technical systems theory (at the inception of which are the eminent physiologists L. J. Henderson and A. V. Hill).

Cyril Burt is let off with a tolerant phrase—"the things the late Cyril Burt wrote in his old age"—followed by a homily about questions of fact versus questions of policy. But the whole point about Burt is that he was the psychologist to the London County Council, sat on innumerable committees formulating policies which are still fundamental to British education, and that he cooked his data to suit his social and political preconceptions.

Reports to the LCC to which he refers cannot be found, even in the LCC printers' records; the samples and data of his twin studies grow from citation to citation and display a (literally) unbelievable numerical precision. There is even some doubt about the authorship of papers signed by one or two of his supposed colleagues (whose very existence is not certain).

I cannot think of a better example of a case which will not conform to Professor Huxley's boundary. The values, theory and policy came first, and the findings were created, embroidered or tidied up to suit them.

Of Shockley—the "courageous" Shockley who was pilloried for proposals for IQ research and prevented from getting an honorary degree at Leeds (for his Nobel Prize-winning work on semiconductors)—Professor Huxley says in a throwaway line: "It is true that Shockley was, at the same time, advocating eugenic measures that were not acceptable to public opinion."

On this argument, it would be an insult to suggest that interested parties should have no say in the advocacy and design of politically sensitive research programmes. Yet the whole debate over IQ is ultimately about black ghettoes and drug research programmes. Putting the matter another way, isn't it a shame that the German (later American) propulsion expert Werner von Braun received no honorary degree from London University for his contributions to rocketry?

These are cases he does mention; what about some he doesn't? Among Nobel laureates there are Konrad Lorenz and Sir Hans Krebs. Where do we draw the line between Lorenz's social Darwinist, racialist and eugenic Nazi pronouncements in 1940; his essays on instinct and other aspects of biologism; his ethological explanation of student radicalism; and his writings on civilization in the last decade?

And how do we explain away Professor Krebs' little essay "Some Facts of Life: Biology and Society", given from a distinguished scientific platform and published and republished in reputable journals (*Proceedings of the Royal Institution of Great Britain* and *Perspectives in Biology and Medicine*). Krebs argues that the facts of biology gainsay most radical causes from progressive taxation and better wages to feminism and world peace. He is at pains to stress that he is speaking purely as a biologist.

The issues raised bring us to books such as *Sociobiology*, *The Selfish Gene* and *The Inevitability of Patriarchy*. These raise vexed—very vexed—questions, but they will not be adjudicated by trying to police a line between fact and value, science and society, or ethics, or policy.

The same can be said of recent debates about human rights in the International Congress of Physiology, the Institute of Physics, the Royal Society and indeed the World Psychiatric Association's meeting in Honolulu. Professor Huxley is preoccupied with the independence of science. It is ungenerous and politically naive to say: "If a scientific body publicly takes a step whose justification is political and not scientific, it will lose the right to claim that it is acting purely in the defence of science on some future occasion."

There are no fences on that range. The label "political" neatly obscures that dissidents in the Soviet Union not only defend free speech but the rights of people who wish to emigrate (usually Jews) and to have jobs in science, technology and medicine. Where is the line between politics, nationalism, racialism, medicine and science?

It is a tactical question—not one of epistemology or boundary-maintenance—whether at a given time it should be the Royal Society which protests on behalf of dissidents or (usually much less effective) human rights organizations or congresses or individuals or other groups, just as it is a matter of tactics whether at a given time to play cricket, football or Rugby with South Africa.

If we keep our eye on the ball rather than the clubhouse, we see that the issue is how best to promote fundamental human rights in South Africa and the Soviet Union. It is depressing that the division of labour has so successfully compartmentalized our humanity and solidarity.

These are all examples of the narrow way Professor Huxley looks at the issues. He should do more homework. The debate is not merely about people being shouted off platforms or attending congresses; it is also about much broader and deeper issues.

It is no longer good enough for eminent specialists in science and scientific administration to look up from years at the workbench and in running busy and productive laboratories, journals and organizations, and to pronounce on the state of the border between science and society as conceived by scientists, scientistic philosophers and social scientists. That formulation—like the claim for the neutrality of science—is blinkered, question-begging and profoundly self-serving.

The world and the debate have moved a long way on. For competing visions, I would recommend Daniel Bell's *The Coming of Post-Industrial Society*, wherein the scientists and other experts are far from independent and Harry Braverman's *Labour and Monopoly Capital: The Degradation of Work in the Twentieth Century*, wherein they are far from neutral. For a more general view of the relationship try Ernest Mandel's *Late Capitalism*, chapter 6.

Some scientists, such as Sir Peter Medawar, are a bit better at this game than others, but they all insist that it is the scientist and the philosopher of science who places and polices the boundary. Various pressure groups are struggling to eliminate this presumption, and thereby eliminate the authority relationship (which is not the same as wishing away authoritativeness). The scientists and other experts must convince the rest of us time and again—each case on its merits—and not merely elicit our deference.

There are already examples of a better relationship between scientists and the wider community. Feminists, for example, increasingly require gynaecologists to explain and discuss until the patient is in a position to take part in decisions about her own body and/or her unborn child's. They, like trade unionists are insisting on their own health and safety standards and experts, and are not content to leave the state or the employer to set and maintain standards.

Similarly, the people of Cambridge, Massachusetts, have—through their local council—required that scientists refrain from conducting genetic engineering experiments unless and until certain public interest conditions were met.

The point about science is not merely one of evidence. It concerns, more importantly, which questions a society wants—through its science—to pursue. This extends from the most general features of a philosophy of nature and society to its most mundane facts.

## *Framework of assumptions*

At the most general level, a given socio-economic order constitutes and is constituted by a world-view, which includes a framework of assumptions and methods about what is known, what is discoverable and how to set about discovering it. At an intermediate level, certain sorts of issues preoccupy investigators at a given phase of development of a socio-economic order: classification in the late eighteenth century, origins in the nineteenth, mechanisms and abilities in the present.

The last of these preoccupations has been linked with the dominance of machinofacture, the division of labour and the need for general ability for industry's requirements. In this period it is unsurprising that the investigators who favour the existing order would propose and defend certain inquiries, and that radicals—and some liberals—would say that it is positively wicked to pursue them.

T. H. Huxley: defender of Victorian science, or of Victorian society?

They are in stark conflict over this because they have competing visions of the social order. It is not the inviolability of scientists' right to ask questions which we should focus on, but the social and political debate over which sorts of questions to ask.

It is right that these issues should be in the public domain. Science, technology and medicine should have to compete with other priorities and values, and those who say so are not merely looking for scapegoats or thinking wishfully. The scientist who says he has more important things to do than spend time on these debates has been too sheltered for too long from public debate.

Looking more deeply, one does not want to see the topics for debate to remain at the level of Burt, Jensen and Shockley. The hand that holds the pen that can write about a section of the population (ex hypothesi, the majority) which might mistakenly conclude "that they are being unjustly excluded from the more interesting and influential jobs", has lived too long and too exclusively in the social milieu of what Noel Annan has called "the intellectual aristocracy" (Darwins, Keyneses, Adrians, Cornfords, Hodgkins, Wedgwoods, Huxleys, Bloomsbury, Oxbridge).

The issue is entirely posed within an elitist, ordinally ranked, meritocratic hierarchy of intelligence. It gently and monstrously slips in the conclusion that if ability (I leave aside large questions here) were largely inherited, it would be just to exclude people from interesting and influential jobs. To reject this comfortable (for some) nest of assumptions, and to raise the possibility of sharing out unpleasant chores and a voice in policy, is not to call for the elimination of diversity, but for the abrogation of privilege based (here's the injustice) on genes.

Why is a more equitable mixture and distribution of mental, manual and clerical tasks not as obvious a priority as universal access to medical services promoting health was designed to be in the National Health Service? For that matter, why is this question not far more important than the ones "courageously" posed by Shockley?

Professor Huxley's way of formulating the issues sets them up so that it is hard—even boorish—to ask, much less to divert resources and energies to changing the framework of debate, the division of labour and the mode of production within which they are considered.

The social, political and policy issues are not, therefore, "encroaching" on science. They determine the division of labour in society, among academic disciplines, the choice of domains, topics, issues, questions, the allocation of resources, how much to persevere, what would count as an answer.

Professor Huxley would have us believe that things were better in the old days. He equates current radicals with Biblical literalists who opposed Darwin, and expresses nostalgia for the prudence, caution and respect for evidence of his grandfather's generation.

He is very glad that Darwin was not impetuous, and collected evidence for twenty years before publishing his theory. Well, things were not so simple in those days either. For example, he doubts that any scientist openly opposed Darwin on the basis that evolution contradicted the idea of a divine element in the spirit of man.

William Whewell (the man who coined the term "scientist") did, and as Master of Trinity would not allow *On the Origin of Species* in the college library. So did the Cambridge professor of geology, Adam Sedgwick, and his grounds were unequivocally those which Professor Huxley doubts were used by any scientist. He wrote to Darwin on just this point [*Life and Letters of Darwin*, II: [illegible]]. Charles Lyell also stressed this objection.

## *Evidence or policy?*

My next example is nearer home and shows that even the most admirable and cautious separator of fact and value cannot always distinguish what is evidence from what is policy. In 1865, T. H. Huxley, at the height of his prestige and eloquence (no elder Burt he), wrote an essay, "Emancipation: Black and White", in which he welcomed the freeing of the American slaves and favoured female education.

So much for enlightened policy. About the evidence he wrote as follows about blacks:

> It may be quite true that some negroes are better than some white men; but no rational man, cognisant of the facts, believes that the average negro is the equal, still less the superior, of the average white man. And if this be true, it is simply incredible that, when all his disabilities are removed, and our prognathous relative has a fair field and no favour, as well as no oppressor, he will be able to compete successfully with his bigger-brained and smaller-jawed rival, in a contest which is to be carried on by thoughts and not by bites. The highest places in the hierarchy of civilization will assuredly not be within the reach of our dusky cousins, though it is by no means necessary that they should be restricted to the lowest.

And women:

> And the result? For our part, though loth to prophesy, we believe it will be that of other emancipations. Women will find their place, and it will neither be that in which they have been held, nor that to which some of them aspire. Nature's old salique law will not be repealed, and no change of dynasty will be effected. The big chests, the massive brains, the vigorous muscles and stout frames, of the best men will carry the day, whenever it is worth their while to contest the prizes of life with the best women.

The issue is not the boundary between facts and values. Social and political beliefs—including wishful thinking as well as false consciousness—generate the interest, the framework, the issues and questions and the criteria for an acceptable answer. And scientific evidence provides and is used as a platform and authoritative basis for propagating and legitimating social, political, economic and ideological positions; which is fine, as long as no one is deceived into thinking that the debate is not political.

Professor Huxley says that he does not think scientists should have a special say; but they do, and the manner and matter of his argument show that he knows it and depends on it. He induces a familiar deference on the part of lesser scientists and laypeople which serves a deeper irony. This is, throughout the address—even in the sage advice extracted from Darwinism and from physiological research—he marches back and forth across the alleged boundary between putatively neutral evidence and policy, ideology, ethics, social values and ideology, which he is at pains to maintain.

Perhaps most ironic of all, he thinks it unreasonable that the scientist should be given a greater share in decision-making than his (sic) fellow citizens, because science can only provide answers to the simplest of questions—only one ingredient of the many involved in a decision. Then where does he get off pontificating about science and society in this simplistic way? I'll always think of this as Huxley's petard.

*Dr Young is author of Mind, Brain and Adaptation in the Nineteenth Century, and a number of studies in the history of biology; he is also active in the radical science movement.*



A hundred internationally distinguished scholars have been meeting in Toronto to discuss the role of universities in western societies. Michael Binyon reports

# Hardliners insist on German criticisms

In response to the strongly worded feelings of almost all the conference participants, the Council's Board approved the sharply critical report produced earlier this year on West German universities.

The report (*THES* June 24) said the future of West Germany's universities was threatened by intense politicization and extremism. Recent government reforms to encourage democratic decision-making had "encouraged and institutionalized" extremism. The universities were in serious danger of being "subverted by Marxists".

It called for a modification of the laws on the governance of universities, reintroduction of an academic hierarchy within universities and much sharper disciplinary measures against striking students.

The report produced an uproar in Germany. The Toronto debate on the report was almost as contentious: not because the conference members disliked it but because they resented the attempt by its authors to tone down the language and modify the criticism.

The history of the report, as presented to the conference, suggested a sorry muddle. At some stage the council gave the German Government its word that it would take the reaction of officials into account before the report was published. This pledge seems to have been forgotten until the last moment, however, and it was only after the report was ready for circulation that it was hastily stamped "interim".

The result was that the German Government was told a final version would be produced. Dr Charles Frankel rewrote the "interim" report in the light of German reactions and to correct some errors. His version kept the 13 conclusions and recommendations, but differed substantially in tone and style. It cut out some of the harsher criticisms; it praised some of the recent reforms; it was more optimistic about the future; and it attempted to put the recent difficulties more in a historical context.

From the start of the debate nobody liked the Frankel version. Participants felt the impact of the original had been lessened; they disagreed with the more optimistic tone; and above all they believed the council would look silly if it tried to back down from its original position.

Some speakers picked out specific changes that were damaging. For example, in the first report, the authors said: "We do not know whether it is theoretically possible to make the group principle work in the university." The revised version ran: "The *Gruppenprinzip* . . . is the framework for the foreseeable future. We believe it is a workable principle. . . ."

The most persuasive argument against any change was that the "interim" report had already received extensive coverage in the German press. If a second one were issued, it was argued, the press would concentrate simply on the differences between the two and ask why they were made, and whether they were the result of pressure from the German Government.

The council voted to remove the "interim" label from the first report, and endorse it. It also resolved to amend some minor errors in a new printing, and to follow the report up with background evidence and additional conclusions, to be published in the American academic journal *Minerva*.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# 'Our responsibility is to truth'

Democratic governments do have the right to demand that universities play a full and responsible role in society, but at the same time universities must fight any attempt by the State to dictate to them or to politicize their workings.

This was one of the key conclusions reached by 100 distinguished scholars from western Europe, Japan and North America at a conference at York University, Toronto, earlier this month. They were especially concerned by the "immense bureaucratization" of universities in Europe, the lowering of academic standards brought on by rapid expansion and threats both from outside and inside the universities to academic freedom and autonomy.

The occasion was the second conference of the International Council for the Future of the University, a body dedicated to the traditional concept and values of a university and strongly opposed to many of the changes that have taken place in universities since 1968.

The first conference, in Venice in 1973, was more urgent in tone and theme, and dwelt on what the founding members perceived as the imminent collapse of western universities as centres of scholarship and research. Participants then focussed on what they saw as the damage being done to universities by student unrest and the "cowardice" of academics in not resisting their demands.

This time the theme was the proper relationship between universities and governments. The demands of governments and the ever-increasing amount of regulation are seen by many senior academics and administrators as a grave threat to university autonomy and to free inquiry. But though there was little disagreement at Toronto over the danger, specific complaints varied so much from country to country (affirmative action in the United States, money worries in Britain, centralization in Scandinavia, politicization in Germany) that no single theme or concerted plan of action emerged.

The range of discussion was outlined on the first day by Professor Charles Frankel, professor of philosophy at Columbia University and president of the International Council.

He said universities were now under pressure for quick results. They were also peculiarly vulnerable to fashionable political creeds, and many were now living with outdated reforms introduced by governments 10 years ago.

The greatest danger was that of ignorant meddling by bureaucrats—a regulation here, a supposed harmless question there—whose net effect would be "to instal public officials as felt presences at every faculty meeting."

Dr Frankel said universities had to fulfil their social responsibilities, but they knew better than others that the most fundamental of these was the protection of free inquiry and the creation of conditions in which the search for truth and the education of the young were most likely to progress.

Other speakers at the conference included Dr Michio Nagai, until recently Minister of Education in Japan, Dr David Mathews, American Secretary of Health, Education and Welfare in President Ford's Cabinet, Dr Frederick Dainton, chairman of the University Grants Committee and university presidents, professors and Nobel Prize winners from 15 western countries.

Among the participants were Sidney Hook, Seymour Martin Lipset, Ernest Nagel and Edward Shils from the United States, and Max Beloff, Jean Floud, Julius Gould, Kenneth Minogue and Rosemary Murray from Britain.

The keynote speech was by Ricardo Diez, for many years an official in such international organizations as the World Bank and Unesco and now responsible for the new Spanish Government's policy of liberalization in the universities. He emphasized the importance to universities of government money, and said in return for this universities had an obligation to be accountable to democratic governments and to society as a whole.

Edward Shils, professor of sociology at the University of Chicago and a Fellow of Peterhouse, Cambridge, included affirmative action in the United States in his review of unwarranted Government attempts to influence academic appointment.

Explaining the historical background, he said: "It is not explicitly stated that the best qualified and most promising candidate must be slighted in favour of one less intellectually or academically qualified if the better qualified candidate does not possess the desired ethnic or sexual characteristics while the less qualified one does.

"Nonetheless, the results are clear. The Federal Government has, under threat of the withholding of financial support, imposed what are obviously non-academic, non-intellectual criteria of academic appointment and many universities have attempted to comply, especially in the social sciences and the humanities."

Professor Shils said even this was not enough. It was no longer sufficient for a university department not to discriminate on grounds of race or sex. It must in fact discriminate in favour of "minorities" in order to make up retroactively for the moral failings of earlier generations.

## Council emphasizes need for standards

"The values in which we believe have been distorted by many political authorities and a few scholars", said a conference resolution. Over the past 10 years "we find that 'merit' 'selection' and 'excellence', have been transformed into words associated with repression, exploitation, discrimination and even fascism."

The "crying need" for academic reform had been corrupted. It should be evident "that the attack on selection abandons standards, the attack on merit rewards mediocrity, the attack on excellence exalts inferiority and the attack on competence creates a world of incompetence."

The council said it was "unthinkable" that this "debasement and folly" should occur with the "blessing or the silent consent of the scholars and teachers themselves."

# 1968—year of disaster

One of the most provocative sessions of the conference was an interim report on a major project the council has undertaken—the synthesis and analysis on an international scale of the changes and reforms in European universities (not including Britain) that were made as a result of the student revolt 10 years ago.

So far a tentative summary has concluded that the changes have nearly all been catastrophic for universities. "What started out as a process of democratization has ended up as a process of immense bureaucratization", said Dr Hans Daalder, the coordinator of the project. "What started out as democracy has ended up as straight control."

The report is composed of individual chapters on each west European country and many of the drafts were circulated at the conference. Professor Daalder, from the European University Institute in Florence, outlined a preliminary summary. The report is to be published in a few months.

The summary said European universities were now saddled with immensely time-consuming and bureaucratic forms of governance. "Reforms" imposed on them by governments anxious in the late 1960s to forestall the demands of radical students had taken the academic control of universities out of the hands of the academics, and in many cases given it either to government officials or to a combined majority of students and non-academic university staff.

These experiments with university democracy, however, had not made universities any more responsive to the urgent social questions (the optimum number of students, financial retrenchment, curriculum reform, new career structures for teachers and so on) than they had been under the old system of dominance by professors.

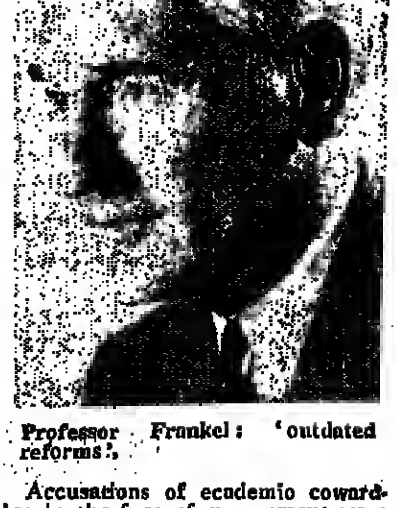
Since representative structures were now impossible to undo, the result was an increasing stream of commands and demands from central ministerial level, which forced universities in turn to strengthen their own bureaucracy to cope with "performance budgeting", "research planning", "efficient educational programmes" and so on.

Dr Daalder said the effects of the revolt were much more drastic in Europe than in Britain or the United States. This was because in nearly all west European countries higher education was more directly under the control of Ministers of Education, and legislatures therefore were traditionally able to intervene.

The student unrest caught universities and governments completely unawares. The result was that in order to head off further trouble, many European universities made local compromises in the expectation that these would not be final. In many European countries the result was hasty reform against a background of slogans about "direct democracy". Opposition to reform was equated with the unfashionable creed of elitism and conservatism.

But few anticipated the far-reaching effect of these reforms. The preoccupation with university governance excluded consideration of other more pressing issues which lay beneath the student revolt and were obscured by it—the relationship of universities to the labour market, the question of size, the career structures of teachers and so on.

These things again raised their heads after the new structures of governance had been set up, and at a time of tightening budgets. Universities found difficulty in coming to conclusions when so many conflicting interests had a say in decision-making, and ministries, losing patience with the universities, gradually assumed more control themselves.



Professor Frankel: 'outdated reforms'.

Accusations of academic cowardice in the face of government were a leitmotif of the conference. The bureaucratization of European universities was possible, it was said, because of the spinelessness and passivity of university teachers. The destruction of academic standards and values was the result of the swift concessions made to students after 1968.

One of the most embattled of all the participants, Professor Jeanne Hersch from the University of Geneva, said she was horrified by the "complete paralysis" of her colleagues in the face of radical politicking at her university. She said the politicization of a university could happen anywhere at any time. It came from within the university. "There is no more science in the old sense of the word, it is political action, it is inside the subject and has destroyed the idea of objectivity."

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Marxism in higher education

# Danger of taking the threat from the Left too seriously

The Conservative chairman of an outer London borough's education committee, bewildered by the metamorphosis of the local college of technology into an embryonic polytechnic, once remarked: "Sociology, social work, socialism—it's all the same thing." As a distinguished professor of sociology, Professor Julius Gould, the author of *The Attack on Higher Education*, can hardly accept the wording of this rather crude, but expressive, formula, but he and his colleagues do at times in their new pamphlet seem to sympathize with the spirit behind it.

There are three fundamental failures in Professor Gould's study of Marxist penetration into higher education, which was published this week by the Institute for the Study of Conflict. First, it fails to identify adequately who precisely is trying to subvert our academic and cultural institutions. Secondly, it fails to convince the uncommitted that there is a threat on the scale he and his colleagues suggest. Finally, they fail to suggest what should be done to combat this Marxist menace if it does exist.

On the first point the subtitle of the pamphlet—Marxist and *Radical* Penetration (our italics)—reveals this failure of definition. Obviously in the view of the study group all "subversives" are not Marxists: nor are all Marxists "subversives" and even those Marxists who are are subversive in different ways and at different levels of sophistication. So to be sure of hitting their target Professor Gould and his colleagues employ the technique of the blunderbuss. But it is just not good enough to justify this by saying that Marxists are sometimes "coy" about revealing their true loyalties.

Is it even sensible, let alone scientific, to lump together David Harvey, author of *Social Justice and the City*, M. F. D. Young, the Campaign for Academic Freedom and Democracy, the new president of the National Union of Students, Community Development Projects, Case Con, the magazine of radical social workers, and many others? Here the study group seems to be indulging in precisely the same crude but suggestive oversimplification of which they accuse their opponents.

The second objection to Professor Gould's analysis arises from the first. Just as it is not always clear who precisely is being accused so there is a lack of definition about the charges. He suggests that "selected university departments have fallen squarely into radical or Marxist hands" but fails to say which these are or indeed how many have been captured by the Left in this way. Again, he suggests that these extremists "rely, like any other network, upon mutual support with the making of appointments" which hardly seems surprising.

Indeed when all the ambiguity and qualifications are remembered and the rather melodramatic, even lurid, prose is discounted, all that is really been said is that some departments in universities and polytechnics have a strong left-wing character. Surely this is nothing more than part of the desirable diversity of the academic world. After all, there are many departments with a strong right-wing character as well. No sensible person supposes that the values that inform, say, Nuffield and All Souls in Oxford are the same: no civilized defender of a pluralistic academic tradition would consider it desirable that they should be.

Bias cannot be eradicated from higher education without at the same time sapping the vitality of its intellectual life. Parliamentarism, Whiggery, clericalism, all seemed in their day self-contained systems of values with ambitious to intellectual monopoly, as Marxism appears today to Professor Gould and his colleagues. Yet it was their influence, and the reactions they provoked, which produced the academic tradition which he now urges us to defend.

What is important surely is the balance of bias—a well-tried principle that once weighed Anglican King's College in the Strand against that Godless institution in Tower Street. Professor Gould claims there is "something clearly disproportionate in the strength of the extreme Left in the educational world" but as he has failed both to identify the "extreme Left" or to give any quantitative measure of its strength it is difficult to judge the accuracy of his claim. It is just as possible that the present virulency of the Marxists is a recognition of their insecurity in face of a liberal majority as an indication of their arrogance as "the long march through the institutions" triumphantly proceeds.

The third failure is perhaps the most easy to forgive. We are told that we must understand how wrong the radicals are first in what they say and then in what they do. This is not difficult. Most people in higher education are not hard-line Marxists or indeed Marxists at all and they recall from the kind of vulgar clichés derived from Marx that pass for learning in a few departments in certain disciplines. Nor is it news that the extreme Left is not distinguished for its respect for constitutional democracy.

But we are not told what we must do. Yet if the threat to intellectual pluralism is as great and as imminent as the study group suggests, surely something positive must be done to meet it. In one sense it may be a tribute to the liberalism, however short-tempered, of Professor Gould and his colleagues that they do not suggest blacklists and witch-hunts. Perhaps they realize after all that such repressive measures strengthen the cause of their opponents. Perhaps they realize too that such measures are incompatible with a sense of liberty, academic or political: that to fight their opponents with such weapons is to join them.

However, this pamphlet is a polemic tailored to the prejudices of the Press, so likely to receive wide publicity. As such it is a form of intimidation, not just of the extreme Left which perhaps deserves it, but of any individual, but of a much wider section, which does not. The real target of The Attack on Higher Education is not the Marxists, who are doing the attacking but the silent majority which allegedly is making such a stand of defending liberal values.

Here perhaps Professor Gould has hit on a grain of truth. It is the decay of the centre which has allowed more radical ideologies to thrive. But it is also the direct decline in the self-confidence of the centre that has allowed bodies such as the Institute for the Study of Social Conflict to be taken more seriously. Professor Gould obviously feels that the first of these two phenomena is much more important than the second: The THES believes that is the other way round.

The demoralization of the centre is easy to understand. The debris of deflationary times, the cruel ahead for social democracy, intellectual rescrutiny is almost dry rot, the death of Anthony Crosland that's one in sight to refill it; it is taunted by four-letter politics of the extreme left, it fears its civilized values will be submerged in a tide of populism and nativism; the belief in progress is blighted by philosophical doubts and a mediocre economic growth. The moderate Right face similar problems.

Yet its essential values remain intact in higher education and the outside world. And it is these liberal values that Professor Gould now invites us to trample underfoot in our rush to defend them against an external threat which, where it is not entirely imaginary, is puny both in the number of its supporters and its intellectual sophistication. We should not sell our souls to this pretty Mephistopheles.

# LETTERS TO THE EDITOR

## Social work admissions at NELP

Sir,—Although the Council for Education and Training in Social Work is still in discussion with North East London Polytechnic about the future of the two-year Certificate of Qualification in Social Work course, following the withdrawal by the polytechnic of first-year places, it would be right to point out to your readers that we do not view the matter in the way Dr Brosan describes in his letter (THES, September 9). The council's statement of August 26 gives a full account of the reasons for its action.

In brief, the council's view is that the original decision not to admit the individual student was properly taken under procedures between the polytechnic and the council. The polytechnic, its governors and its academic board are presumably bound by such agreements. The agreement may, of course, be changed by mutual consent if the selection procedures are found inadequate, but should not be changed, as it were, retrospectively.

Further, the procedures should not be capable of yielding to pressure to admit a particular individual, although it is quite reasonable that there may be a quota for a special group of applicants, provided the individuals within that group meet defined criteria.

We also accept that any admission procedure involves fallible judgments, in the same way as do examination procedures. This is widely accepted and is no reason for such judgments to be set aside. Although the polytechnic's authority in these matters is vested in the academic board, it is difficult to see how that authority can be exercised in practice except by a group of staff who must be seen to have its trust and confidence.

Yours faithfully,
PRISCILLA YOUNG,
Director,
Central School for Education and Training in Social Work.

Sir,—Dr Brosan's letter (THES, September 9) concerning the closure of the CQSW course at NELP is too limited a view to present to your readers. Firstly, there is no mention of the request made by the course tutors that Mr Vyas be independently assessed. This request which constituted a potential solution was rejected by the Joint Education Committee, which furnished no reasons.

Secondly, although Dr Brosan cites the agreement for reserving places on the course for Education Welfare Officers from the London Boroughs of Barking, Newham and Waltham Forest, he omits to say that the last sentence of this agreement states: "All candidates will be expected to comply with the usual selection procedures".

As NELP's director says admission policy and procedure is the domain, under the articles of government, of the academic board. It is interesting to note that Dr Brosan, the chairman of this board, has never asked the board for an interpretation of the above statement. Instead he has been willing to abide by the statewhat eccentric interpretation of the words: "usual selection procedures" which has emerged from the JEC. Under the articles of government the JEC has no authority over the running of courses or over selection procedures but it seems that he is not opposed to its assuming these powers.

Not only is he not opposed in the pastiun of the JEC but he sees it as support for the polytechnic in a dispute with the central council. It would be interesting to learn why he is receiving the benefit of such dubious support. Since both the students' union and the NATFHE branch have condemned the JEC decision it is apparent that when the director says the polytechnic be means the director.

In another article published in the same issue ("Governors form rival body") ex Dr Brosan's letter, our director is concerned with building a power base to combat the "increasing capriciousness and malevolence" (sic) of the local education authorities. If I had been asked to sum up the outstanding features of the JEC's action throughout this case I could hardly have chosen two more opposite nouns.

Yours faithfully,
TOBY GRAINGER,
Acting president,
Student's Union,
North East London Polytechnic.

Sir,—Your leader of September 2 concerning the non-admission of Mr S. Vyas to the CQSW course sets out many of the facts quite fairly. But I need to clarify my personal position. I am wholly in sympathy with Mr Vyas, and I think that the social work staff here have acted with less than common sense. Their procedural judgment, which I respect, is that Mr Vyas would not make a good social worker. My problem is that his immediate professional superiors in Newham, where he is actually working as a social worker, think that not only is he a good social worker but a very good one. I respect that professional judgment as well.

Obviously, with such conflicting professional evidence, there is doubt. And since by agreement made about a year ago some places were reserved specifically for people from the boroughs of Barking, Newham and Waltham Forest, I think quite strongly that he should have been given the benefit of the doubt and admitted to the course. It is in this respect that common sense should have prevailed.

The Central Council for Education and Training in Social Work has a fair point when sir says admission to the course must be under the rules it has approved, and which have the ultimate sanction of the Privy Council. But it has not taken sufficient heed of the Articles of Government of the polytechnic, which give the academic board the final say on admissions. These articles have the approval of the Secretary of State for Education and Science. This issue needs sorting out in principle. The central council, it seems, does not sufficiently appreciate that it is dealing with a formally designated polytechnic.

For this reason, among others, I think that the attitude of the Joint Education Committee of the boroughs concerned is correct, and that of the central council is wrong. I do not think that the JEC is dictating to the polytechnic; to the contrary, it is backing it in a dispute with an outside body. If other local authorities would do the same, the benefits would soon become apparent.

Yours faithfully,
G. S. BROSAN,
Director,
North East London Polytechnic.

## Professor Elton and change in schools

Sir,—Professor Lewis Elton writes (THES, September 9): "Unfortunately since the proportion of working-class children reaching higher education today is not significantly different now to the years before the Second World War, obviously we have largely failed to tap this source. Presumably we have therefore ... instead dipped more deeply into the middle-class barrel."

Perhaps Professor Elton could explain how the proportion of working class students can remain the same while the proportion of middle-class students the balance of the total can increase. This seem an arithmetical impossibility.

Numerically the number of working-class students has greatly increased since before the war, while the relative size of the working class has decreased; thus a larger proportion of working class children go on to higher education than formerly, considered as a proportion of their class.

Sir,—Among a number of sweeping generalizations made by Professor Elton is one taking British universities to task for not following the American practice of making allowance for the regional variations in "of considerable magnitude") which occur in the distribution of A-level performance in England and Wales. While it is true that no explicit scaling, or normalizing, of A-level results according to region is done, it is, I believe, naive to assume that the factors which could be contributing to atypical or unrepresentative results are in fact ignored.

A valuable part of most interviews is that which explores the background to the pupil's work, the conditions under which he is studying, the kind of facilities available, the way in which his teaching is conducted, and so on. Although a deprivation may well have a national average hurdle, in terms of A-levels, below which it may doubt whether entry is wise, the actual offer made may well often differ markedly from the town, when the variety of factors which may influence performance are taken into account. I believe this to be a far more effective way of dealing with the problem which Professor Elton raises than by some convenient "blanket" allowance based on averages of widely-varying parameters arising in a regional survey.

Two points spring to mind concerning his comments on the fact that students with very *low* A-level grades nevertheless have a good chance of obtaining a degree, and that it would be wrong not to do them out of it. The first is the changing intent the teaching to the changing intake". It is by no means self-evident that all the forms of higher education available in the university is necessarily the best for an individual. A good standard of pass in a non-university type course may well lead to greater fulfilment than what might be a marginal pass in a degree course. Many departments here for many years been carrying out the kind of adaptations that Elton calls for.

Yours faithfully,
G. S. HEAVENS,
Professor of Physics,
University of York.

*Letters for publication should arrive by Tuesday morning at the latest. They should be as short as possible and the editor reserves the right to cut or amend them if necessary.*

# CLASSIFIED ADVERTISMENTS

## Universities

### NEWCASTLE COLLEGE OF ADVANCED EDUCATION
### Australia

Newcastle College of Advanced Education is a multi-purpose College of advanced education with its own governing Council. In 1977 a wide range of courses has been offered in the fields of Teacher Education, Art, Liberal Education and Technical and Further Education. These courses will be complemented in 1978 by courses in Nursing and Social Work. The E.F.T.S. in 1977 is 2,200 with a total enrolment of 2,500. There will be a modest increase in student numbers in 1978.

The academic structure is under review. Presently it has a departmental base but it is likely that the new structure, while retaining departments, will be based on a school system and that the revised structure will come into effect early in 1978.

#### HEAD OF DEPARTMENT OF ART
SALARY $A24,504
(Re-advertised)

The Art Department has an academic complement of 20 with approximately equal and ancillary staff and offers studies in painting, sculpture, graphics, drawing, design, ceramics and glass, to Diploma and Degree students.

Mr. L. A. Ware, an eminent sculptor and foundation Head of the Department, is retiring.

The College is seeking to appoint an artist of high repute from any field of Fine Art. An interest and experience in Art Education would be an advantage. The appointment, in the first instance, will be as Head of Department of Art but, in conjunction with the revision of the academic structure of the College, a School of Visual and Performing Arts will emerge. The College activities in Art and Crafts, although Arts will embrace the College activities in Art and Crafts, although there will continue to be a separate Department of Art to service the academic requirements of the School. It is hoped that the person appointed will have qualifications which make him suitable for consideration for headship of this likely new school.

#### SENIOR LECTURERS
SALARY RANGE : $A19,290-$20,885

SOCIAL WELFARE (Re-advertised)

The successful applicant, who will be responsible for the Associate Diploma programme will be expected to establish and implement criteria for the training and accreditation of field development supervisors and to supervise the Field Development Programme. He/she will also be responsible for establishing a student placement system and procedures for the supervision of students. In addition, he/she will be responsible for developing courses and teaching in one or more of the components of the Social Welfare Course, e.g. Family Welfare, Medical Welfare, Counselling.

The successful applicant should have had experience in Tertiary Education including wide experience in the supervision of students and administrative experience in the organisation of field placements. Candidates must be eligible for membership of the Australian Association of Social Workers and should have relevant field experience. A knowledge of overseas practice would be an advantage.

SPECIAL EDUCATION :

The successful applicant will have responsibilities in the academic programme of the Department of Special Education and the clinical, research and teaching activities of the Special Education Centre. He/she will also have some teaching responsibility. In addition he/she will be expected to take a leading role in one or more of the following: Centre programme, communication disorders; learning disorders in secondary level children, severe handicaps and early intervention; learning difficulties in elementary level children, special education in high demand schools; developmental disabilities (particularly autism, severe retardation or brain damage); classroom teacher training and mainstreaming; severe developmental disabilities (particularly autism, severe retardation, or brain damage) or psychomotor disorders. The successful applicant should have strong teaching experience with normal and developmentally disabled children and some experience in applied research and clinical diagnostic procedures.

RECREATION—LEVEL II :

The successful applicant will be responsible for the development of courses of study, practical community field work supervision and academic research ordinarily in Recreation. Experience in sporting and non-sporting recreational activity across a wide section of the community will be an advantage.

The appointee of the Special Education Centre at the Newcastle College of Advanced Education would provide opportunities for the development of a research project relating to recreation within Special Education, e.g. recreation for the infirm, the disadvantaged, disabled and the aged.

QUALIFICATIONS :

Applicants for lecturer positions should normally possess a higher good Honours Degree or equivalent. It is essential that applicants demonstrate a desire and a capacity to apply their discipline in practical situations.

APPOINTMENT :

The term of appointment will be subject to negotiation. Some appointments at Lecturer level II may be on a limiting contract basis.

CONDITIONS OF EMPLOYMENT :

Appointment will be made to the College under the Colleges of Advanced Education Act and in terms of the College's By-law. Conditions of Employment have been determined under the Act and include attractive SHE Housing Loan and Superannuation Schemes and provision is made for study and recreation leave. Assistance will be provided for fares, removal and initial accommodation expenses for the appointee and their families.

The salaries quoted above will be subject to adjustment arising from any flow-on of the recent National Wage decision.

APPLICATIONS :

General information about the College and specific enquiries concerning the positions should be directed to the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

Applications in writing must include personal information and full details of academic qualifications and experience and the names and addresses of three referees with phone nos. The original application should be addressed, marked "Confidential" to: The Secretary, Newcastle College of Advanced Education, Box 84, P.O. WARATAH, N.S.W. 2298, Australia, and should preferably be sent by registered airmail. A copy of the application must also be sent to the Association of Commonwealth Universities as above.

Applications should be lodged to reach Australia by 15 October, 1977.

#### LECTURERS
SALARY RANGES :
LEVEL II $A14,345-$16,420
LEVEL III $A12,348-$14,182

SPECIAL EDUCATION—LEVEL II :

The successful applicant will have joint involvement in the lecture programme and the training, research and clinical service activities of the Special Education Centre. Specific expertise in one or more of the following areas will be required: communication disorders; learning disorders in secondary level children; sensory handicaps and early intervention; resource-teacher training; regular classroom teacher training and mainstreaming; severe developmental disabilities (particularly autism, severe retardation, or brain damage) or psychomotor disorders. The successful applicant should have strong teaching experience with normal and developmentally disabled children and some experience in applied research and clinical diagnostic procedures.

RECREATION—LEVEL II :

The successful applicant will be responsible for the development of courses of study, practical community field work supervision and academic research ordinarily in Recreation. Experience in sporting and non-sporting recreational activity across a wide section of the community will be an advantage.

The appointee of the Special Education Centre at the Newcastle College of Advanced Education would provide opportunities for the development of a research project relating to recreation within Special Education, e.g. recreation for the infirm, the disadvantaged, disabled and the aged.

QUALIFICATIONS :

Applicants for lecturer positions should normally possess a higher good Honours Degree or equivalent. It is essential that applicants demonstrate a desire and a capacity to apply their discipline in practical situations.

APPOINTMENT :

The term of appointment will be subject to negotiation. Some appointments at Lecturer level II may be on a limiting contract basis.

CONDITIONS OF EMPLOYMENT :

Appointment will be made to the College under the Colleges of Advanced Education Act and in terms of the College's By-law. Conditions of Employment have been determined under the Act and include attractive SHE Housing Loan and Superannuation Schemes and provision is made for study and recreation leave. Assistance will be provided for fares, removal and initial accommodation expenses for the appointee and their families.

The salaries quoted above will be subject to adjustment arising from any flow-on of the recent National Wage decision.

APPLICATIONS :

General information about the College and specific enquiries concerning the positions should be directed to the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

Applications in writing must include personal information and full details of academic qualifications and experience and the names and addresses of three referees with phone nos. The original application should be addressed, marked "Confidential" to: The Secretary, Newcastle College of Advanced Education, Box 84, P.O. WARATAH, N.S.W. 2298, Australia, and should preferably be sent by registered airmail. A copy of the application must also be sent to the Association of Commonwealth Universities as above.

Applications should be lodged to reach Australia by 15 October, 1977.

SCIENCE (ANATOMY/PHYSIOLOGY) :

It is expected that the successful applicant will have specialist qualifications in the field and preferably be a registered medical practitioner.

He/she must be able to have a variety of courses in the field of physiology/anatomy, including analysis, to satisfy requirements for students in medical diagnostic radiography, physiotherapy associated with sport and other physical education oriented courses, psychological components of the Nurse Education Course.

### KELVIN GROVE COLLEGE OF ADVANCED EDUCATION
### BRISBANE

Kelvin Grove College of Advanced Education is an autonomous, multi-vocational college specializing in the preparation of pre-school, primary and secondary teachers. It offers a wide range of in-service courses for teachers which include a four year degree programme.

Applications are invited for the position of

#### LECTURER/SENIOR LECTURER IN MATHEMATICS

REF. NO.: 77/A/15

QUALIFICATIONS :

1. A higher degree in Mathematics Education, preferably at the Doctoral level, with major studies in Primary Mathematics Education.
2. Post graduate studies in mathematics would be an advantage.
3. Successful experience in teaching and developing Primary School Mathematics Programmes.
4. Successful experience in teaching and developing Mathematics Education programmes at the tertiary level is desirable.

DESCRIPTION :

That person appointed will be expected to work in the Mathematics Department within the Division of Science. The Department is presently offering courses in the teaching of pre-school, primary and secondary school mathematics towards the awards of Diploma of Teaching and Bachelor of Education offered by the College. The Department expects to offer a course leading to the award of Master of Education in Primary Mathematics from 1979. The Mathematics Department is located in a modern building with excellent facilities. A person with initiative, energy and experience is required who can contribute to the development of the above programmes which meet the needs of both schools and the community at large.

SALARY AND CONDITIONS OF SERVICE :

| | |
|---|---|
| Senior Lecturer II | $14,345-$16,420 per annum |
| Senior Lecturer I | $16,809-$18,884 per annum |
| Lecturer II | $19,290-$20,885 per annum |
| Lecturer I | $21,123-$22,505 per annum |

Conditions of service are comparable to those in universities and colleges of advanced education throughout Australia. Appointment will be made at a level appropriate to the qualifications and experience of the applicant.

DATE OF APPOINTMENT :

The successful applicant would be expected to take up duty by January, 1978, but no later than July, 1978. The College Council reserves the right to make no appointment and the right to invite applications.

CLOSING DATE :

21 days from the date of appearance of this advertisement.

Application forms and additional information are available from The Registrar, Kelvin Grove College of Advanced Education, Victoria Park Road, Kelvin Grove, Brisbane, Queensland, 4059.

Further inquiries may be directed to the Head of the Mathematics Department.

### UNIVERSITY OF GUYANA
#### VACANCIES
#### DEPARTMENT OF MINING ENGINEERING

Applications are invited for the following posts in the Department of Mining Engineering.

**1. SENIOR LECTURER :**

Applicants should have at least a Master's degree in Mining Engineering, and a minimum of five years' industrial and/or research experience. University teaching experience would be an advantage. The successful candidate will be required to lecture and conduct tutorials in Mineral Geology/Surface Mining at the Higher Technical Diploma level. He will also be expected to pursue research in the relevant field. He will be required to take up his post by November, 1978.

**2. LECTURER :**

Applicants must possess at least a first degree in Mining Engineering and be eligible for membership of a recognised professional institution. The successful applicant will be required to lecture in Geology/Mineral Geology/Surface Mining at the Higher Technical Diploma level. He will also be expected to pursue research in the relevant field. Teaching and relevant professional experience would be an advantage.

**SALARY SCALES (per annum)**

Senior Lecturer—Grade 2 $G12,350 by $540 to $13,300.
Lecturer—Grade 1 $G7,000 by $480 to $14,760.
Point of entry on the scale would be determined by qualifications and related experience.

Benefits include housing allowance, contributory Pension and Medical Scheme. Persons recruited from overseas will receive up to four free passages (i.e. for himself, wife and unmarried children up to age of 18 years) on first tour of duty. Gratuity at the rate of 12½% on completion of first tour of duty. Settlement Allowance.

Applications (8 copies) stating name, date of birth, marital status, qualifications and dates obtained, work experience (with dates), salary and accompanied by three referees (one of the referees must be the present or last employer where applicable), must reach the Personnel Section, University of Guyana, P.O. Box 841, Georgetown, South America, before 15th October, 1977.

### UNIVERSITY OF DAR ES SALAAM TANZANIA

Applications are invited for the post of

**PROFESSOR/ASSOCIATE PROFESSOR/SENIOR LECTURER IN FOREIGN LANGUAGES AND LINGUISTICS (ENGLISH)**

tenable as soon as possible and not later than May, 1978.

The Department's programme includes courses at undergraduate and MA level in Linguistics, English and French and the possibility of PhD supervision. The appointee, who will teach mainly in the English section, should be experienced in one or more of the following fields: English for academic purposes, English syntax and semantics, sociolinguistics, teaching of second language acquisitions, other topics in Applied Linguistics; he/she should be an outstanding teacher and administrator and willing to undertake administrative duties. Experience of Africa and knowledge of Swahili would be advantageous. Salary scale: Professor TC4,050 p.a., Associate Professor TC3,570-TC3,870 p.a., Senior Lecturer TC2,970-TC3,720 p.a. (TC=£1.39 sterling). The British Government may supplement salary in certain cases in range £4,182-£4,914 p.a. (sterling) for married appointees or £2,430-£2,988 p.a. (sterling) for single appointees (normally free of all tax and national insurance) and provide children's education allowances and holiday passages. FSSU, Family passages; biennial overseas leave.

Detailed applications (two copies), including a curriculum vitae and naming three referees, should be sent by air mail, not later than 6 October, 1977, to the Chief Academic Officer, University of Dar es Salaam, PO Box 35091, Dar es Salaam, Tanzania. Applicants resident in UK should also send one copy to Inter-University Council, 90/91 Tottenham Court Road, London W1P 0PT. Further particulars may be obtained from either address.

### THE QUEEN'S UNIVERSITY
#### Chair of Social and Preventative Medicine

Applications are invited for the Chair of Social and Preventative Medicine, which carries the headship of the Department of Community Medicine. It is a Joint Appointment with the Eastern Health and Social Services Board and is tenable from 1st January, 1978, or such other date as may be agreed. The Chair was vacated on 30th September, 1976, on the retirement of Professor Pemberton, assistantship with removal expenses is available.

*Further particulars may be obtained from the Personnel Officer, The Queen's University of Belfast, BT7 1NN, Northern Ireland (quoting Ref. 77/78). Closing date, 1st November, 1977. (Please quote Ref. 77/TH.)*

### UNIVERSITY OF SYDNEY
#### THE RAYMOND E. PURVES CHAIR OF SURGERY

Applications are invited for the newly established Raymond E. Purves Chair of Surgery in the field of Transplantation. Salary will be at the rate of $A35,192 per annum. A statement of Conditions of Appointment and information for Candidates may be obtained either from the Secretary General, Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Registrar, University of Sydney, N.S.W. 2006, Australia, with whom applications close on 31 October, 1977.

### UNIVERSITY OF DAR ES SALAAM TANZANIA

Applications are invited for the post of

#### SENIOR RESEARCH FELLOW/RESEARCH FELLOW IN BOTANY (HERBARIUM).

Applicants should be holders of a PhD or an MSc in Plant Taxonomy and have working experience in a comparable institution; in the case of MSc holders, at least three years' experience in herbarium work will be required. Duties will include collections of vegetation, plant specimens from various localities in Tanzania, identifying the specimens, preparing them for deposition in the Botany Department Herbarium or for exchange with other institutions and, in general, maintaining the growth of the herbarium which currently has about 30,000 plant specimens. Salary scales: Senior Research Fellow TC3,970-TC3,720 p.a. Research Fellow TC2,480-TC2,970 p.a. (TC is equal to £1.43 sterling). The British Government may supplement salary in ranges £3,846-£4,182 p.a. (sterling) for married appointees or £2,344-£2,430 p.a. (sterling) for single appointees (normally free of all tax and national insurance) and provide children's education allowances and holiday passages; FSSU, Family passages; biennial overseas leave.

Detailed applications (two copies), including a curriculum vitae and naming three referees, should be sent by air mail, not later than 6 October, 1977, to the Chief Academic Officer, University of Dar es Salaam, PO Box 35091, Dar es Salaam, Tanzania. Applicants resident in UK should also send one copy to Inter-University Council, 90/91 Tottenham Court Road, London W1P 0PT. Further particulars may be obtained from either address.

### UNIVERSITY OF ZAMBIA

Applications are invited for

#### 2 LECTURESHIPS IN THE SOCIAL SCIENCE FOUNDATION COURSE

In the Department of Social Development Studies in School of Humanities and Social Sciences. Applicants should have a degree in any of the Social Sciences. Preference will be given to applicants with one or more of the following: (i) Experience in teaching at either first-year university or secondary school level; (ii) Experience of teaching quantitative methods; (iii) A background in more than one of the social sciences. Applications from people with more than one of the above qualifications are particularly welcome. Salary scale: Lecturer Grade I K5,700-K9,108 p.a. The British Government is unlikely to provide salary supplementation and associated benefits. Family passages; various allowances; supplementation and medical aid schemes; regular overseas leave. Detailed applications (two copies), including a curriculum vitae and naming three referees, should be sent by airmail, not later than 5 October, 1977, to the Chief Academic Officer, University of Zambia, PO Box 2379, Lusaka, Zambia. Applicants resident in UK should also send one copy to Inter-University Council, 90/91 Tottenham Court Road, London W1P 0PT. Further particulars may be obtained from either address.

### BRADFORD
THE UNIVERSITY
[illegible]

### DURHAM
THE UNIVERSITY
[illegible]

## Universities continued

### AUSTRALIA

Applications are invited for the following posts, for which applications close on the dates shown. Salaries (unless otherwise stated) are as follows: Professor $A30,788; Postdoctoral Research Fellow $A12,683-$A14,445; Lecturer $A14,345-$A18,884; Tutor $A10,159-$A11,983; Half-time Tutor $A5,079-$A5,992.

Further details conditions of appointment for each post, method of application and application form, where applicable, may be obtained from The Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

University of Melbourne
**JAMES STEWART CHAIR OF SURGERY**
(The Royal Melbourne Hospital)
Applications are invited for this Chair, which will become vacant with the retirement of Professor Maurice Ewing at the end of 1977. The successful applicant must hold a medical qualification permitting registration in Victoria and may be a person with either general surgical or specialist surgical interests. Salary $A35,162.
11 November, 1977.

La Trobe University, Melbourne
**CHAIR IN ENGLISH/LITERATURE**
(Readvertised)
The Department of English teaches at all undergraduate year levels, and in addition there is a small graduate school. The Department offers courses in English literature from Chaucer to the present including American and Australian literature.
This vacancy has been created by the appointment of the Foundation Professor D. R. C. Marsh, to a Chair at the University of Western Australia.
29 October, 1977.

University of Tasmania
**LECTURER AND TUTOR IN INFORMATION SCIENCE**
A relevant consideration for selection will be the interests the appointee will bring to the Department. Other things being equal, preference may be given to applicants who have interests in one or more of the areas of: operating systems, computer architecture, databases, commercial computing.
7 October, 1977.

Murdoch University, Perth Western Australia
**POST DOCTORAL RESEARCH FELLOW IN FINANCE**
Applications are called for the position of Post Doctoral Research Fellow in Finance at Murdoch University. The successful applicant will work under the direction of the Professor of Economics in the School of Social Inquiry.
The research will be in the general area of Australian financial institutions such as banks, building societies and finance companies and the economic environment in which they operate. The precise direction taken by the research will be agreed between the Professor of Economics and the successful applicant whose special research interests will be borne in mind. By arrangement with the Perth Building Society, which has endowed the Fellowship, the Fellow will be responsible for preparing a paper each year for inclusion in the Society's annual publication, Milestone.
Applications will be considered from persons who can arrange secondment from their present employment. Applicants will be expected to have a postgraduate degree in Economics, Commerce, or some closely related discipline. The initial appointment will be for a period up to two years with the possibility of renewal for a further year.
14 October, 1977.

University of Melbourne
**LECTURER IN THE DEPARTMENT OF ENGLISH**
Applicants for this position should preferably hold a higher degree in English, with special qualifications in the language and literature of medieval England. The chief concerns of the appointee will be with the teaching of Old and Middle English and, if possible, Old Norse. There will also be opportunity to participate in teaching in other areas within the department.
The successful applicant will be expected to take up duties as early as possible in 1978 and will have opportunities to share in the teaching of both Pass and Honours courses, and to take part in postgraduate teaching.
15 October, 1977.

James Cook University of North Queensland
Department of Commerce
**LECTURER IN COMMERCE (EDP)**
The Lecturer will be primarily responsible for developing and teaching EDP subjects to students of accounting. He will also be expected to develop an area of research, preferably one which complements existing departmental programmes, most of which are applied and relevant to the region. Applicants should have appropriate academic qualifications and/or experience in EDP. Expertise in managerial accounting or financial management would be an advantage.
31 October, 1977.

**LECTURER IN COMMERCE (COMMERCIAL LAW)**
Applicants should have appropriate academic and professional qualifications. It is desirable that an appointee has practised commercial law in Australia or New Zealand. The Department of Commerce covers the fields of Accounting, Commercial Law and Business Economics. There are two lecturing positions in Commercial Law within the Department.
31 October, 1977.

University of New England, Armidale, New South Wales
**ITALIAN TUTOR DEPARTMENT OF ROMANCE LANGUAGES**
Duties will include language tutorials and marking of assignments from internal and external students.
Applicants should have an honours degree with a substantial Italian component or an Italian laurea. Preference will be given to native Italian speakers.
31 October, 1977.

**LECTURER PSYCHOLOGY**
The Department teaches at undergraduate and postgraduate levels most areas of psychology to internal and external students.
Applicants with suitable qualifications in any area of psychology considered. Experience of teaching at the tertiary level an advantage.
14 October, 1977.

**TUTORS DEPARTMENT OF ECONOMIC HISTORY**
1½ Positions:
Successful applicants are expected to participate in teaching courses which emphasize European English American and/or Australian Economic History. Applicants should also have a good grounding in theoretical aspects of economic history. Half Tutorship could be taken up by an applicant wishing to undertake or complete a higher degree.
14 October, 1977.

**TUTOR DEPARTMENT OF PREHISORY AND ARCHAEOLOGY**
1 Position:
Preference given to applicants with a general background in World Prehistory, cultural anthropology and a research interest in the prehistory of the Pacific area including Australia.

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# OVERSEAS TEACHING POSTS

## LECTURERS IN TECHNCAL SUBJECTS (NIGERIA)

Heads of Department, Senior Lecturers and Lecturers in the following Departments:
1. Civil Engineering and Building
2. Mechanical and Production Engineering
3. Electrical and Electronics Engineering
4. Environmental Studies (Town Planning, Quantity Surveying, Architecture, Estate Management and Land Surveying)

Murtala College of Arts, Science and Technology, Makurdi.
To set up, organise and teach courses in this recently established but rapidly developing institution.
Qualifications: good degree or relevant professional qualification plus teaching experience.
Salaries:
Head of Department : Naira 8868-9828 p.a.
Senior Lecturer : Naira 7104-7752 p.a.
Lecturer : Naira 5460-6984 p.a.
(£1=Naira 1.15 at present rate of exchange)
Benefits: 10-15% contract addition and 15% contract gratuity; low rental housing; car loan; 2 year contracts, renewable 77 TO 150-161

## LECTURER IN ENGLISH LANGUAGE AND LITERATURE (JAPAN)

M.A. and at least 2 years teaching experience.
Hiroshima University
Salary: Yen 191000-256000 per month. (Rate of exchange approximately Yen 470=£1) and annual bonus.
Benefits: Installation and education grants; rent allowance; medical scheme; two year contract. 77 PU 150

Return fares are paid. Local contracts are guaranteed by the British Council. Please write briefly stating qualifications and length of appropriate experience, quoting relevant reference number and title of post, for further details and application form to The British Council (Appointments), 65 Davies Street, London, W1Y 2AA.

THE BRITISH COUNCIL

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# UNIVERSITY OF RHODESIA

## FACULTY OF EDUCATION

Planned development within the Faculty of Education gives rise to two of the undermentioned posts. Additionally, one research fellowship on contract terms is available and a vacancy has arisen in the Institute of Education.

**Chair of Curriculum Studies (New):**
Applications are invited for a Second Chair in the Department of Education to be filled by someone able to take a lead in curriculum planning, innovation and research both within the Faculty of Education and in the wider educational community. The appointee will be responsible for co-ordinating courses in curriculum studies at higher degree level.

**Lecturer in Educational Technology (New):**
This post presents a unique opportunity for the right person to play an important part in educational development in Rhodesia at this time of change. The post is available from 1 January, 1978 or as soon as possible thereafter.
Applications are invited for this new post in the Faculty's Educational Technology Unit, from qualified teachers with the appropriate experience that will enable them to give an educational lead in this field. The post will be available from 1 January, 1978 and is tenable in the first instance for two years.

**Lecturer, Institute of Education:**
A vacancy will occur for a lecturer/senior lecturer in the Institute, which is concerned mainly with the development of teacher training courses and with furthering the qualifications and experience of serving teachers. Applications are invited from people with experience and interests in one or more of the specialisms normally offered by colleges of Education, or which might be developed in the special field of African Teacher Education.

**Environmental Studies Innovator:**
Applications are invited for appointment from 1 January, 1978. Environmental Studies Innovator to support the work of the Environmental Education Committee recently established to formulate a syllabus for this new subject in African primary schools. The base will be the Science Education Centre of the Faculty of Education. The work of the Committee and the Research Fellow will be central to the Centre.
Candidates should be able to contribute to the problems of determining the overall aims and scope of the subject and the evaluation of proposals for appropriate and feasible teaching approaches. Evidence of resourceful and imaginative teaching will be expected. Experience of participation in curriculum development will be an advantage.
The post is tenable for one year, with a possibility of extension to a second year.

**For Lecturers:**
Both permanent, pensionable terms and short-term one or two-year contracts are offered.

**Permanent Pensionable Terms:**
Family passages and allowance towards transport of effects on appointment. Installation loan of up to half of one year's salary if required. University accommodation guaranteed for a period of at least three years for persons recruited from outside Rhodesia. Sabbatical leave and triennial contact visits with small allowances. Superannuation and medical aid schemes.

**Short-term contracts:**
Family passages and allowances towards transport of effects for those with accommodation for persons recruited from outside Rhodesia.

**For Research Fellows:**
Family passages and allowance for transport of effects on appointment. Housing allowance. Superannuation and medical aid schemes. (Approx. 5½ Conrs.):

**Salary Scales**

| | |
|---|---|
| Lecturer Grade II | £ 4,576 x £243 - £ 5,791 x £[illegible] |
| Lecturer Grade I | £ 7,1[illegible] x £2[illegible] - £ 8,520 |
| Senior Lecturer | £8,[illegible] x £[illegible] - £9,477 x £320 - £[illegible] |
| Professor | £11,2[illegible] x £420 - £13,340 |
| Research Fellow II | £ 4,2[illegible] x £2[illegible] - £ 5,594 |
| Research Fellow I | £ 5,[illegible] x £2[illegible] - £ 6,906 |
| Sn. Res. Fell. | £ 6,5[illegible] x £2[illegible] - £ 8,[illegible] |

Applications giving full personal particulars and details of qualifications, experience and publications and the names and addresses of three referees, should be submitted by 14 October, 1977, to the Secretary, Academic Registry, University of Rhodesia, P.O. Box MP 167, Mount Pleasant, Salisbury, Rhodesia, from whom further particulars may be obtained. Overseas applicants should send a copy of their applications to the Association of Commonwealth Universities (Appts), 36 Gordon Square, London WC1H 0PF, from whom conditions of appointment may be obtained.
British subjects considering applying for posts in Rhodesia are urged to consult the Foreign and Commonwealth Office (telephone 233 4143) or their nearest British Consular Office.

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NORTH BRISBANE COLLEGE OF ADVANCED EDUCATION
BRISBANE AUSTRALIA

# Head of Department Community Studies

North Brisbane College of Advanced Education is an autonomous multipurpose institution with campuses at Kedron Park and Carseldine in Brisbane's northern suburbs. The College has four academic departments — Community Studies, Business Studies, Liberal Studies and Teacher Education — and offers courses at undergraduate and postgraduate level in business studies and education, and at undergraduate level in liberal arts, welfare and recreation. The total enrolment in 1978 is expected to be about 1,500 students.

The Department of Community Studies at present consists of six academic staff and has direct responsibility for the Associate Diploma courses in Community Recreation and Community Welfare. Further courses at advanced level in both fields as well as Community Education courses are projected for the next triennium.

Applicants should ideally have expertise and experience in both Recreation and Welfare particularly in relation to the overall development of Australian community resources and should possess a higher degree in at least one of these fields. They should also have had administrative experience as well as success in promoting and organizing courses at a tertiary level. In addition, experience in community development is desirable.

The salary offered is $23,542 per annum.

Application forms and further information may be obtained from The Registrar, North Brisbane College of Advanced Education, P.O. Box 117, Kedron, Qld 4031.

Applications close on 4 November, 1977.

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### LEEDS
THE UNIVERSITY
SCHOOL OF ECONOMIC STUDIES

Applications are invited from suitably qualified candidates for the post of LECTURER in INDUSTRIAL ECONOMICS in the above school. Appointment from January 1, 1978, on the scale £3,333 to £6,666, with initial placement according to age, qualifications and experience.

Application forms and further particulars may be obtained from the Registrar, The University, Leeds LS2 9JT, quoting reference number 31/11/DC. Closing date for applications October 9, 1977.

### LONDON
UNIVERSITY COLLEGE
DEPARTMENT OF GEOGRAPHY

RESEARCH ASSISTANT(S) required from January 1978 to work in the field of recreation management. Applicants should have experience in environmental management and/or estate management. The work is financed by the SSRC and the salary in the range £3,333 to £3,784 per annum plus London Allowance.

Further details may be obtained from Dr. G. M. Harrison, Dept. of Geography, University College London, (THES) Gower St, London WC1E 6BT.

Closing date October 6th 1977.

### LEICESTER
THE UNIVERSITY
F. W. BENNETT CHAIR OF GEOLOGY

Applications are invited for the F. W. Bennett Chair of Geology which will become vacant from 1 October 1978 following the retirement of Professor P. C. Sylvester-Bradley. There is no restriction as to the special interests of applicants.

Further particulars from the Registrar to whom applications should be sent by 31 October 1977. Candidates in the United Kingdom should submit fifteen copies of their application (overseas candidates may submit one copy).

### WARWICK
THE UNIVERSITY
LECTURESHIP IN LAW

Applications are invited for a post of Lecturer in the School of Law, tenable from January 1, 1978. Applicants with expertise in any field of Law will be considered. Salary on the Lecturer scale: £3,333 to £6,666 per annum.

Further particulars and application forms from the Academic Registrar, University of Warwick, Coventry CV4 7AL, quoting Ref. No. 7/2[illegible]. Closing date for receipt of applications October 12, 1977.

### LANCASTER
THE UNIVERSITY

Applications are invited for the posts of RESEARCH OFFICER and RESEARCH ASSISTANT in the DEPARTMENT OF BEHAVIOUR IN ORGANISATIONS to work with Professor Sylvia Shimmin on a study of [illegible] work, funded by the Medical Research Council. Candidates should be graduates with experience of applied social science research, preferably field research in industry.

Appointment will be for two years from October 1977, or soon after. Salary for both posts on Range 1A, starting salary within range £3,333 to £3,761, according to qualifications and experience, plus superannuation.

Further particulars may be obtained (quoting reference L.59/77) from the Establishment Officer, University House, Bailrigg, Lancaster, LA1 4YW, to whom applications (five copies) naming three referees, should be sent not later than 30th September 1977.

### LEEDS
THE UNIVERSITY
DEPARTMENT OF ANIMAL PHYSIOLOGY & NUTRITION

Applications are invited for the post of RESEARCH ASSISTANT to work on the role of hormones in the control of growth in farm animals. The post is for three years and is supported by a grant from the Agricultural Research Council. Salary on the scale £3,[illegible] for Research and Analogous Staff. Candidates should have a good honours degree in biological sciences with a particular interest in physiology. The successful applicant will be encouraged to register for a higher degree.

Applications, together with the names of two referees, should be made by 7th October, 1977, to the Registrar, University of Leeds, LS2 9JT, from whom further particulars may be obtained.

### MALAYA
THE UNIVERSITY
LANGUAGE CENTRE

Applications are invited for the posts of LECTURER in the DIVISION of INTERPRETATION and TRANSLATION of the Language Centre.

Qualifications: Candidates for the appointment must possess (1) at least a Master's degree in Malay Studies, or English or Linguistics from a recognized university; (2) Proficiency in Bahasa Malaysia (Malay) and English; (3) Knowledge of other languages like French, Japanese and Chinese will be given consideration.

Experience: (a) Should have done work pertaining to Interpretation of Conferences or of International Interpretation or Translation; (b) have taught at university level.

Salary scales (all inclusive) (approximate sterling equivalents): [illegible]

Further particulars and application forms are obtainable from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF. The closing date for receipt of application is October 11, 1977.

### DURHAM
THE UNIVERSITY
DEPARTMENT OF POLITICS

Applications are invited from graduates with appropriate qualifications for the post of RESEARCH ASSISTANT [illegible] tenable from October 1, 1977 or as soon as possible thereafter. The appointment will be for two years in the first instance, renewable for a third and final year. Salary on the scale [illegible] to £3,[illegible] per annum with superannuation.

Further particulars from the Registrar and Secretary, Old Shire Hall, Durham DH1 3HP, to whom applications (three copies), naming three referees, should be sent by September 23, 1977.

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UNIVERSITY OF BRADFORD

## ADDITIONAL CHAIR IN CIVIL ENGINEERING

In making this appointment the University aims to complement the specialist interests of Professor C. B. Wilby. These are structural engineering and concrete technology. Further particulars from the Registrar, University of Bradford, Bradford, West Yorkshire, BD7 1DP. Closing date for receipt of applications Monday, 31 October, 1977.

UNIVERSITY OF BRADFORD

UNIVERSITY OF CAPE TOWN

## POST OF ACADEMIC SECRETARY AND DEPUTY REGISTRAR

Applications are invited for the above newly established post. This is a senior administrative position requiring experience of a university or similar educational institution. The incumbent will be directly responsible to the Registrar for the proper functioning of the academic section of the central administration of the university. Appointment is to take effect as soon as possible. Salary will be determined in accordance with the qualifications and experience of the successful applicant.

An information memorandum giving full details of the duties involved and general conditions of service should be obtained from the Registrar, Room 1, University of Cape Town, Private Bag, Rondebosch 700, South Africa, by whom applications should be received not later than 30th October, 19[illegible].

UNIVERSITY OF BRADFORD

## IN CHAIR PEACE STUDIES

the Chair following Professor Adam Curle's announcement of retirement to be effective [illegible] particulars from the Registrar. Applications are invited for from 30 September, 1978. Further, University of Bradford, Bradford, West Yorkshire, BD7 1DP. Closing date for receipt of applications—30 November, 1977.

UNIVERSITY OF BRADFORD

ULSTER:
THE NEW UNIVERSITY EDUCATION CENTRE

## LECTURER IN EDUCATION

(Educational Development and Administration)

Applications are invited for a full-time lectureship within the Education Centre, which is available from 1st January, 1978. Candidates should be honours graduates with experience of teaching in schools and with special qualifications or special interest in the field of educational development and administration or of social organisations, with particular reference to educational development and administration. Qualifications in the advanced study of education would be an advantage.

Salary: £3,333-£6,655 per annum (with FSSU/USS).

Further particulars may be obtained (quoting Ref. 77/107) from The Registrar, The New University of Ulster, Coleraine, Co. Londonderry, BT52 1SA, to whom applications, including a tabulated curriculum vitae and names and addresses of three referees, should be sent not later than 7th October, 1977.

### ASTON IN BIRMINGHAM
THE UNIVERSITY
ADMINISTRATIVE ASSISTANT (Personnel)

Applications are invited for appointment as Administrative Assistant in the University's Staffing Department which is responsible for all matters relating to the appointment, promotion, conditions of service and welfare of University staff. The Department is also responsible for the management of relations with the recognised trade unions.

The successful candidate will be directly responsible to the Staff Officer who is Head of the Department. The duties will be mainly in connection with the recruitment, wages, administration, conditions of service and welfare of all weekly paid staff of the University of which there are currently some 600.

Candidates should preferably be graduates in the age range 25 to 34. Ideally they should have recent experience of modern personnel practice, and a working knowledge of current industrial legislation.

The salary will be within the range £3,[illegible] to £5,[illegible] per annum on the Administrative 1A scale.

Further details may be obtained from the Staff Officer, The University of Aston in Birmingham, Gosta Green, Birmingham B4 7ET, to whom applications should be returned not later than 14 days after the appearance of this advertisement. Please quote reference [illegible].

### KENT
THE UNIVERSITY AT CANTERBURY
FACULTY OF SOCIAL SCIENCES

LECTURER IN QUANTITATIVE SOCIAL SCIENCE/MANAGEMENT SCIENCE

Applications are invited for a post of LECTURER in the Board of Studies in Quantitative Social Science and Management Science, with effect from 1st January, 1978, or as soon as possible thereafter. The person appointed will be expected to take part in the teaching and research of the Board, and to contribute to the development of graduate and undergraduate teaching, provided by the Board. Applicants interested in quantitative aspects of the behavioural sciences and/or of management science will be particularly welcome.

Salary, according to qualifications and experience, will be on the scale £3,333 to £6,666.

Application forms and further particulars may be obtained from Mr. J. E. Reilly, Assistant Registrar, The Registry, The University, Canterbury, Kent CT2 7NZ. Completed application forms (three copies) should be returned not later than Wednesday, 5th October, 1977. Please quote reference A32/77.

### BRISTOL
THE UNIVERSITY
FACULTY OF ENGINEERING

LECTURER IN ENGINEERING MATHEMATICS

Applications are invited from Mathematicians or Engineers with mathematical interests for the above appointment in the Department of Engineering Mathematics.

The department is responsible for the teaching of mathematics to students in the Faculty of Engineering and from October 1977 is offering an undergraduate course in Engineering Mathematics.

Applicants should have teaching and research interests in control theory, operational research, stochastic processes or related fields.

The starting date is open to negotiation but should be as soon as possible after 1st January 1978. The initial salary will be in the range of £3,333 to £5,4[illegible], on a scale which progresses by increments to a maximum of £6,[illegible] per annum. The appointee will receive membership of U.S.S.

Applications stating age, qualifications and experience and including the names of three referees, should be sent not later than [illegible] October 1977 to the Secretary, Senate House, Tyndall Avenue, Bristol BS8 1TH (quoting reference [illegible]), from whom further particulars may be obtained.

### CARDIFF
UNIVERSITY COLLEGE

Applications are invited for the post of POSTDOCTORAL RESEARCH ASSOCIATE (Scale 1A) in the Departments of Computing Mathematics and Sociology to work on the S.S.R.C. funded project investigating the use of a relational data base management system in Social Science applications.

Salary within range £3,333 to £3,761.

Duties to commence 1st January 1978.

Applications (two copies), together with the names and addresses of two referees should be forwarded to the Vice-Principal (Administration and Registrar), University College, P.O. Box 78, Cardiff, CF1 1XL, from whom further particulars may be obtained. Closing date: 15th October 1977.

Please quote reference 1329.

### DURHAM
DURHAM UNIVERSITY BUSINESS SCHOOL
SMALL BUSINESS CENTRE

Two new posts:
TEACHING FELLOW in MANAGEMENT WORKSHOP DEVELOPMENT
RESEARCH FELLOW in NEW ENTERPRISE DEVELOPMENT

The Teaching Fellow will be concerned with the development of management workshops with groups of smaller firms in the Northern Region. The approach involves the bringing together of firms from the same industry to work on common problems. The Fellow will need skills enabling him/her to counsel in a variety of subject areas together with a specialism. Previous management experience is essential. Salary will be on the Lecturers' scale up to £6,666. Appointment will be for two years in the first instance.

The Research Fellow will be expected to undertake in depth study of the development of a select number of new business ventures in the Northern Region. He/she will be actively concerned with the provision of counselling assistance to new start-ups. He/she will have skills in the marketing area. Previous management experience is essential. Salary up to £5,[illegible]. Appointment will be for three years in the first instance.

Further particulars from the Registrar and Secretary, Old Shire Hall, Durham DH1 3HP, to whom applications (three copies), naming three referees, should be sent by 7th October, 1977.

### LONDON
SENIOR SECRETARY

Required for office at Lord Annan, Provost, University College London. Graduate preferred. Special responsibility for some committee work, drafting minutes and other material. Good shorthand and typing essential and an ability to work as part of a team.

Salary within scale £[illegible] to £3,[illegible] inclusive.

SECRETARIAL ASSISTANT also required by Lord Annan. Good education and high speeds essential. Secretarial College leaver considered. Excellent working conditions.

Salary within scale £2,[illegible] to £3,[illegible] inclusive. Generous holidays.

Applications giving chronological career details to Assistant Secretary (Personnel), University College London, Gower Street, WC1E 6BT. Telephone 01-387 7050, ext. 207.

### MALAYA
THE UNIVERSITY
FACULTY OF EDUCATION

Applications are invited for the posts of LECTURER in the Faculty of Education in any one of the following fields: (a) Development Studies in Education or Educational Planning; (b) Sociological Studies in Education; (c) Educational Studies with specialisation in Educational Technology (Radio and TV); (d) Teaching of English as a Second Language; Applied Linguistics; (e) Curriculum Development, etc. [illegible]

In addition candidates are required to train teachers in the methods of teaching the following school subjects. Candidates with teaching experience in any of the following subjects will be given preference: (f) PHYSICS; [illegible] BIOLOGY; [illegible] MATHEMATICS; [illegible] LANGUAGE; [illegible] STUDIES; [illegible] MALAY LITERATURE; [illegible] LIVES and CO-CURRICULAR ACTIVITIES; MORAL EDUCATION.

Qualifications and Experience: Candidates should possess at least a Master's degree or a Ph.D. and possess teaching experience at a trained teacher in Secondary Schools.

Salary Scales (all inclusive): [illegible] Review Point £6,[illegible] by £[illegible] to £6,7[illegible] per annum. The commencing salary for lecturers with a Ph.D. degree shall be £[illegible] per annum.

Further particulars and application forms are obtainable from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

The closing date for the receipt of applications is 12th October, 1977.

### EDINBURGH
THE UNIVERSITY
DEPARTMENT OF MECHANICAL ENGINEERING
POST DOCTORAL RESEARCH FELLOW

Applications are invited for a POST DOCTORAL RESEARCH FELLOW to work on underwater shock phenomena. The project, which is sponsored by the Ministry of Defence for two years, will determine the effect of cavitation on the interaction between a shock wave and a submerged structure.

Salary within the range £3,333 to £3,[illegible], with [illegible] Superannuation scheme conditions applying.

Applications giving details of qualifications and experience, including the names of two referees, to Dr. M. G. Childs, Department of Mechanical Engineering, King's Buildings, Mayfield Road, Edinburgh, EH9 3JL. Please quote Reference 6026.

### BIRMINGHAM
THE UNIVERSITY
ADMINISTRATIVE ASSISTANT

Applications are invited for a post of Administrative Assistant in the Registry. Good Honours degree required and sound administrative experience, preferably though not necessarily in an academic institution, desirable.

Appointment initially to the Arts and Law Division of the Registry. Appointee will work in the Combined Honours Office with immediate responsibility to the Senior Tutor to Combined Subjects Students.

Salary in Administrative 1A scale: £3,901 to £4,811 (under review) plus superannuation.

Applications, by October 14, 1977, to Senior Assistant Secretary, University of Birmingham, P.O. Box 363, Birmingham B15 2TT, from whom further particulars and application forms may be obtained.

### LEICESTER
THE UNIVERSITY
DEPARTMENT OF BIOCHEMISTRY

Two positions are available for three years from October 1977 on an S.R.C. funded project concerned with the expression of genes transferred from eukaryotes into bacteria. The project will involve the biochemical and genetic manipulation of genes cloned via phage and plasmid DNA's.

(1) RESEARCH ASSOCIATE (Postdoctoral)

Applicants should have postdoctoral experience of bacterial genetics and/or DNA biochemistry. Salary on the scale £3,333 to £3,761.

(2) RESEARCH TECHNICIAN (Grade 5)

Applicants should have technical experience in microbial genetics or biochemistry. Salary on the scale £2,0[illegible] to £2,[illegible].

Applications, including a curriculum vitae and the names of two referees, should be sent to Professor Kornberg, Department of Biochemistry, University of Leicester, University Road, Leicester LE1 7RH.

### LEEDS
THE UNIVERSITY
SCHOOL OF EDUCATION
CENTRE FOR STUDIES IN SCIENCE EDUCATION

Assessment of pupils' scientific development

Applications are invited for a post in a team, under the direction of Professor R. Layton and based on the Centre for Studies in Science Education, which will collaborate with a similar team at the Science Education Centre, Chelsea College, in work on the assessment of school performance in science. The project is part of the programme of the Assessment of Performance Unit of the D.E.S.

The post will largely be concerned with the development and validation of a wide range of assessment techniques suitable for use with pupils of 15 and 16 years.

Salary will be on an appropriate scale within the range £3,333 to £6,666. Appointments will be for periods up to two years.

Application forms and further particulars may be obtained from the Registrar, The University, Leeds LS2 9JT, quoting reference number 20/14/DC. Closing date for applications 10th October, 1977.

### LEEDS
THE UNIVERSITY
SCHOOL OF EDUCATION
CENTRE FOR STUDIES IN SCIENCE EDUCATION

Applications are invited for a temporary post of LECTURER IN EDUCATION (BIOLOGY) for the Session 1977-78. Applicants should be well qualified in biology and education.

The duties attached to this post include 1-year method work with Graduate Certificate students. An interest in teaching integrated science courses would also be welcomed.

Salary will be at an appropriate point on the Lecturers' scale £3,333 to £6,666.

Application forms and further particulars may be obtained from the Registrar, The University, Leeds LS2 9JT, quoting reference number 20/15/DC. Applications should be returned by 10th October 1977.

### MALAYA
THE UNIVERSITY
LANGUAGE CENTRE

Applications are invited for the post of LECTURER in the DIVISION of INTERPRETATION and TRANSLATION of the Language Centre.

Qualifications: Candidates for the appointment must possess (1) at least a Master's degree in Malay Studies, or English or Linguistics from a recognized university; (2) Proficiency in Bahasa Malaysia (Malay) and English; (3) Knowledge of other languages like French, Japanese and Chinese will be given consideration.

Experience: (a) Should have done work pertaining to Interpretation of Conferences or of International Interpretation or Translation; (b) have taught at university level.

Salary scales (all inclusive) (approximate sterling equivalents): £2,602 by £168 to £3,939 to £4,107 by £168 to £4,443 to £4,780 by £480 to £6,181/Review Point to £6,602 by £336 to £6,799.

Further particulars and application forms are obtainable from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF. The closing date for receipt of applications is 11th October, 1977.

### MANCHESTER
THE UNIVERSITY
MANCHESTER BUSINESS SCHOOL

LECTURESHIP IN CREATIVITY concerned with the generation and development of ideas for solving problems or exploiting opportunities, and the encouragement and management of this process by individuals, by groups and by organisations.

LECTURESHIP IN ENTREPRENEURSHIP concerned with the foundation and management of new or newly growing business enterprises or other independent ventures or projects.

Applications are invited for the above posts. Salary range £3,333 to £6,666 per annum, U.S.S. Further particulars and application forms, returnable by [illegible], from the Registrar, The University, Manchester M13 9PL. Quote ref. 147/77/THES.

### MANCHESTER
THE UNIVERSITY
INSTITUTE OF SCIENCE AND TECHNOLOGY
DEPUTY BURSAR (Finance)

Applications are invited from candidates of either sex possessing a professional accountancy qualification for the post of Deputy Bursar (Finance) which will become vacant upon the retirement of the existing holder on 30th September, 1977. The appointee will be responsible for the daily supervision and control of a finance office administering an annual budget of £13 million. Candidates should have wide experience of financial and general administration, preferably in a University, and be capable of making a significant contribution to the development of the organisation and its systems.

The salary will be on the SAO III scale £6,443-£7,951 per annum.

Application forms and further particulars may be obtained from the Registrar, UMIST, P.O. Box 88, Manchester, M60 1QD, to whom applications must be forwarded by 17th October, 1977.

### NEW ZEALAND
Palmerston North
MASSEY UNIVERSITY
LECTURER IN EDUCATION

Applications are invited for the abovementioned position in the Department of Education. The candidate appointed will act under the direction of the Head of the Department of Education and may be required to undertake duties related to extramural tuition, in addition to internal teaching and research.

Special consideration will be given to applicants who, besides having appropriate general qualifications, are experienced in some professional field in education and are capable of participating in the in-service courses in the Diploma in Education and the Bachelor of Education degree within the Faculty. The successful applicant will be expected to take up appointment on 1.1.78 or as soon as possible thereafter.

Salary: NZ$10,279 to $12,515.

Further details of the Department's activities together with the general conditions of appointment may be obtained from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF.

Applications close on 14 October 1977.

### NEW ZEALAND
UNIVERSITY OF OTAGO
Dunedin
LECTURER OR SENIOR LECTURER IN MARKETING

Applications are invited for the abovementioned position in the Faculty of Commerce. The position involves teaching at undergraduate, postgraduate and post-experience (M.B.A.) levels and would be of special interest to a candidate wishing to develop course work in one or more of the following areas:

General Marketing Management, Market Research (with special reference to application of quantitative techniques), Marketing of Agricultural Products, International Marketing from a New Zealand point of view, or Societal Aspects of Marketing (Social Responsibility in Marketing Management).

There are opportunities for research work, case study, executive development and consulting work.

Salary Scales: Lecturer NZ $10,250 to $13,[illegible]; Senior Lecturer NZ$12,[illegible] to $15,[illegible] with a bar at $14,[illegible] per annum.

Further particulars are available from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF or from the Registrar of the University.

Applications close on 15 October 1977.

### THE OPEN UNIVERSITY
FACULTY OF SOCIAL SCIENCES
LECTURESHIP IN RESEARCH METHODS

Applications are invited for appointment to a LECTURESHIP in RESEARCH METHODS. The person appointed will be engaged in developing and maintaining two of the Faculty's courses, Research Methods in Education and the Social Sciences and Statistical Sources. Qualifications should include research experience in one or more of the five disciplines represented in the faculty, i.e., Economics, Geography, Government, Psychology and Sociology.

Salary will be within the range: £3,333 to £6,666 per annum plus U.S.S. benefits.

Further particulars and application forms are available by post card only from the Personnel Manager, The Open University, P.O. Box 75, Walton Hall, Milton Keynes, MK7 6AA.

Closing date: 6th October, 1977.

### NEW ZEALAND
UNIVERSITY OF OTAGO
Dunedin
UNIVERSITY POST DOCTORAL FELLOWSHIPS

The Council of the University invites applications for University Post Doctoral Fellowships tenable in any Department of the University in 1978.

In addition to contributing to current research programmes, the successful applicants will be required to undertake a limited amount of teaching.

A Fellowship will carry an emolument in a range of NZ$7,000 per month to $9,[illegible] per annum according to experience, and will normally be for one year. Under exceptional circumstances it may be renewed. The emolument is taxable in New Zealand. The maximum value of each Fellowship is NZ $10,000 per annum comprising both emolument and travel expenses, but in no case will the emolument exceed NZ$[illegible] per annum.

Removal expenses within the above limits will be allowed to and from Dunedin.

Further particulars are available from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, or from the Registrar of the University, P.O. Box 56, Dunedin, New Zealand. Applications close on 30th October, 1977.

### THE OPEN UNIVERSITY
FACULTY OF SOCIAL SCIENCES
STAFF TUTORSHIP IN THE SOCIAL SCIENCES
SOUTH WEST REGION

Applications are invited for appointment to the post of STAFF TUTOR in the SOCIAL SCIENCES, based at Plymouth. Applicants should have specialist qualifications in PSYCHOLOGY with an interest in the social sciences generally, and appropriate teaching experience. Main duties will include assistance to the Regional Director in the appointment, training and supervision of part-time tutors, and liaison with members of the University's central academic staff. There will be a considerable amount of evening work and travel.

The successful candidate will be appointed to the Faculty of Social Sciences, but will be organisationally responsible to the Regional Director, South West Region, in the Regional Office at Bristol.

The appointment will be offered at a suitable point on the scale £3,333 to £6,666 plus U.S.S. benefits.

Application forms and further particulars are available by post card only from the Personnel Manager, The Open University, P.O. Box 75, Walton Hall, Milton Keynes, MK7 6AA.

Closing date: 7th October, 1977.

### THE OPEN UNIVERSITY
INSTITUTE OF EDUCATIONAL TECHNOLOGY
(Director, Professor [illegible])
STUDENT ASSESSMENT RESEARCH GROUP
TEMPORARY LECTURER IN STUDENT ASSESSMENT

Applications are invited for the above post in the Institute's Student Assessment Research Group (Head, Dr. C. J. Rythe).

The successful candidate will undertake research aimed at improving the design, construction and evaluation of the university's assignments and examinations. The work will entail both conceptual and empirical aspects. One end-product will be the production of manuals to assist subject experts with the writing of improved assessment materials. Another will be to make recommendations in the light of the research to the university's examinations and assessment committee on the strengthening of policy in this area.

Applicants are likely to have a relevant higher degree, some familiarity with the following areas, and a special interest in at least one: (1) educational assessment/measurement, with special reference to achievement testing; (2) curriculum theory; (3) educational research methods. A good working knowledge of philosophy, epistemology, philosophy of science, and/or psychology (human learning, personality) would be a strong recommendation, as would be practical experience in developing tests of knowledge. Teaching experience is highly desirable also.

The post is on a two-year contract at the Open University, Milton Keynes. Secondment is possible. Salary: £3,333 to £6,656, plus U.S.S. benefits.

Application forms and further particulars are available, by postcard request, please, from the Personnel Manager (SA91), The Open University, P.O. Box 75, Walton Hall, Milton Keynes MK7 6AL, or by telephone from Milton Keynes 63868. Closing date for applications: October 5, 1977.

### NEW ZEALAND
UNIVERSITY OF AUCKLAND
RESEARCH FELLOWSHIP
LEIGH LABORATORY

Applicants should have a Ph.D. degree and research experience in some branch of Marine Science. The laboratory acts as a research and advanced training facility for the Departments of Botany, Geology, Physics and Zoology. Duties of the appointee will include the personal prosecution and general promotion of research in one or more areas of marine research, and staff duties in connection with the facilities, teaching programmes and general work of the laboratory.

The Research Fellow will have the status of a Lecturer and the appointment will be for a period of three years in the first instance.

Salary, according to qualifications and experience, within the range NZ$9,[illegible] to $12,176 plus cost-of-living allowance of NZ$360 per annum.

[illegible] Commonwealth Universities from the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London, WC1H 0PF.

### SHEFFIELD
THE UNIVERSITY
POSTGRADUATE SCHOOL OF LIBRARIANSHIP AND INFORMATION SCIENCE

Applications are invited for two posts of:—
RESEARCH ASSISTANT
to work on a major survey of information needs in the medical profession directed by Mr. G. Ford. Tenable one year from 1 October, 1977, or as soon as possible thereafter. One post is suitable for a recent graduate in social science, although this is not a requirement. One post is suitable for a recently qualified Librarian—and this second post will be based in London. Salaries either £2,[illegible] or £3,119 on II & A Range IB with superannuation provision, and London weighting for one post.

Particulars from the Registrar and Secretary, The University, Sheffield S10 2TN to whom applications should be sent by 28 September, 1977 (later applications may be considered). Persons may contact Mr. Ford by telephone (0742-78680) if they so wish.

## Universities continued

### PAPUA NEW GUINEA

UNIVERSITY OF TECHNOLOGY

HEAD OF DEPARTMENT OF BUSINESS STUDIES

PROFESSOR/ASSOCIATE PROFESSOR

Applications are invited for the above-mentioned appointment.

The Department of Business Studies is one of the two departments of the Faculty of Business Administration, and works in close cooperation with the Department of Accounting and Financial Management in administering four-year courses for the Accounting and Business Studies streams of the Bachelor of Technology degree and the five-year Bachelor of Commerce degree. The Department conducts courses in Economics, Social Psychology, Personnel Management, Industrial Relations, Public Administration, Marketing, Advertising and Quantitative Techniques.

The University is seeking an academic with industrial experience who will have demonstrated the potential capacity to give strong leadership in the department, and be able to contribute to existing courses as well as develop post experience and postgraduate courses, relevant to the needs of management in P.N.G.

The salary level will be either that of an Associate Professor Grade K17,372 or that of a Professor K19,276. (Kina 1 equals approximately 0.76p, U.S.$1.20, A$1.14.)

Allowances additional to salary are payable as follows: married K2,300 per annum, single K1,500 per annum. In certain circumstances a child allowance of K156 per annum is also payable. An educational allowance and additional fares may be provided for children being educated away from their parents' place of residence. Other benefits include furnished housing (hard goods only) supplied at nominal rental, leave fares in place of recruitment every second year and equivalent fares to Canberra, Australia each alternate year and six weeks' annual leave. Superannuation benefits apply in most circumstances. Study leave of six months will accrue after five semesters of service.

Appointment will be on a contract basis for a maximum of six years in the first instance. The University reserves the right to make no appointment or to make an appointment by invitation at any stage.

Applications in duplicate should include full details of age, nationality, marital status, family if any, qualifications, present post and the names and addresses of three referees from whom confidential inquiries can be made. Further information will be forwarded to all applicants. Applications are required by 31 October, 1977 and should be sent to the Registrar, The Papua New Guinea University of Technology, P.O. Box 793, LAE, Papua New Guinea. A copy of the application should be sent to the Association of Commonwealth Universities (Appts.), 36 Gordon Square, London WC1H 0PF, from whom conditions of appointment may also be obtained.

### ST. ANDREWS

THE UNIVERSITY

DEPARTMENT OF BOTANY

Applications are invited for a LECTURESHIP in the DEPARTMENT of BOTANY. Preference will be given to botanists with an interest in cytology. The successful candidate is expected to take up post on or soon after 1st February, 1978.

Salary at appropriate point on scale £3,333 to £6,655, starting salary probably not above £4,811; USS/FSSU.

Applications (two copies, preferably in typescript) with the names of three referees should be lodged by 17th October, 1977, with the Establishments Officer, The University, College Gate, St. Andrews, Fife, from whom further particulars may be obtained.

### SALFORD

THE UNIVERSITY

CHAIR OF BIOMEDICAL ENGINEERING

Applications are invited for the newly-established CHAIR OF BIOMEDICAL ENGINEERING. The successful candidates will be primarily concerned with research and postgraduate activities.

The salary will be within the professorial range, the minimum of which is £8,108 per annum.

Applications should be received by the Registrar, The University of Salford, Salford, M5 4WT (from whom further particulars may be obtained) by October 7, 1977. Please quote reference number BE/330/THES.

### WALES

THE UNIVERSITY

UNIVERSITY COLLEGE OF SWANSEA

LECTURER

Applications are invited for the vacancy of LECTURER in ANCIENT HISTORY in the DEPARTMENT OF CLASSICS AND ANCIENT HISTORY. Preference will be given to applicants with special qualifications or interests in one or more of the following: later Greek history; the Roman Republic; Graeco-Roman Art and Archaeology; ancient historiography.

The appointment, which will date from January 1, 1978, will be at the lower end of the scale £3,333 to £6,655 per annum, plus U.S.S./U.S.O.P.S. benefits.

Further particulars and application forms (two copies) may be obtained from the Personnel Officer, University College of Swansea, Singleton Park, Swansea SA2 8PP, to whom they should be returned by Friday, October 7, 1977.

### LEICESTER

THE UNIVERSITY

PUBLIC SECTOR ECONOMICS RESEARCH CENTRE

Applications are invited for the post of RESEARCH ASSISTANT ASSOCIATE in the above Centre, to work on a project which will examine U.K. public sector employment and public sector wages over the post-war period. The project is funded by the S.S.R.C. and will be directed by Dr. P. M. Jackson.

The post is a one-year appointment, tenable from 1st October 1977, or as soon as possible thereafter. Salary will be in the range £2,904 to £3,761 depending upon age and qualifications.

Applications along with the names of two academic referees should be received not later than 30th September and should be sent to Dr. P. M. Jackson, Public Sector Economics Research Centre, University of Leicester, Leicester, LE1 7RH.

### SOUTHAMPTON

THE UNIVERSITY

DEPARTMENT OF ELECTRICAL ENGINEERING

PIRELLI LECTURESHIP

Applications are invited for a temporary Lectureship in the Department of Electrical Engineering. This post is sponsored by Pirelli General Cable Works for an initial 3½-year period. Candidates should have an interest in computational aspects of power systems, including power cables. The successful applicant will be expected to take a full part in the teaching activities of the department, as well as pursuing research in his special field. High academic qualifications and industrial experience are desirable.

Salary scale: £3,333 by £214 (bar) to £6,655. The initial salary will depend on qualifications and experience.

Further particulars may be obtained from D. A. S. Pugsland, The University, Southampton SO9 5NH, to whom applications (seven copies from United Kingdom applicants) should be sent not later than September 30, 1977. Please quote reference 284/A/THES.

## Polytechnics

### MANCHESTER

THE POLYTECHNIC

DEPARTMENT OF ENVIRONMENTAL STUDIES

A 276 LECTURER II IN LANDSCAPE ARCHITECTURE

Applicants should be qualified Landscape Architects, with specialist knowledge in the Environmental Sciences.

The post will give opportunities for promoting research and course development in this field.

A/277 LECTURER II IN ARCHITECTURE

Applicants should be qualified Architects who are aware of current developments in architectural practice and education. A short-term appointment will be considered.

A/278 LECTURER II IN VISUAL STUDIES

The successful applicant will be responsible for the Departmental Visual Studies Workshop, and for the development of two and three-dimensional studies for students of Architecture, Interior Design and Landscape Architecture.

Salary scale: £3,279 to £5,493, plus £192 per annum supplement.

For further particulars and application form (returnable by 28th September, 1977) please send a self-addressed envelope marked with the appropriate reference number to the Secretary, Manchester Polytechnic, All Saints Building, Manchester M15 6BH.

### MANCHESTER

THE POLYTECHNIC

FACULTY OF ART AND DESIGN

HEAD OF DEPARTMENT OF INDUSTRIAL DESIGN (Grade V)

Applications are invited from persons of vision and initiative design and educational experience and proven qualities of leadership.

An opportunity to lead in the further academic development of a department with degree and higher degree courses.

Previous applicants will be considered.

Salary scale: £7,395 to £8,271 plus £492 per annum supplement.

For further particulars and application form (returnable by 31st October, 1977) please send a self-addressed envelope marked "A/281" to the Secretary, Manchester Polytechnic, All Saints Building, Manchester M15 6BH.

### PRESTON

THE POLYTECHNIC

Applications are invited for the following appointments:—

LECTURER II IN LAW

LECTURER II IN ELECTRICAL ENGINEERING

(to teach Power Engineering)

Salary: Burnham Lecturer II Scale £3,744 to £5,985 (including £312 supplement and April, 1977 award).

Applications forms and further particulars may be obtained from the Chief Administrative Officer (Staffing), to whom completed applications should be returned by October 7, 1977.

### LANCHESTER POLYTECHNIC

Coventry - Rugby

**Faculty of Engineering**

**Department of Production Engineering**

**Principal/Senior Lecturer in Computer Aided Manufacture**

The post will be concerned principally with the development of Computer Aided Manufacture and will involve teaching to a variety of courses up to MSc level. It is expected that the successful candidate will be well qualified in the application of computers, preferably in the field of computer aided manufacture, rather than by general experience of production engineering. Nevertheless, the appointee should be prepared to undertake some teaching duties within production engineering but outside the immediate confines of computer aided manufacture.

Salary scale:
Principal Lecturer £5,940-£6,642-£7,578.
Senior Lecturer £5,031-£5,955-£6,417.
Plus £492 supplements per annum.

Interested persons who wish to discuss the post informally are invited to contact Mr. R. L. Aston, Department of Production Engineering, telephone Coventry 24166 extension 278.

For application form and further particulars please apply in writing enclosing a foolscap stamped and addressed envelope to the Assistant Secretary (Personnel), Lanchester Polytechnic, Priory Street, Coventry CV1 5FB, returnable by 14th October, 1977.

### LANCHESTER POLYTECHNIC

Coventry - Rugby

**FACULTY OF ART AND DESIGN**

**Lecturer Grade II– Industrial Design**

Department of Industrial Design

Design Engineer or Industrial Designer with engineering experience required to teach on BA(Hons) degree Course in Industrial Design (Transportation).

Candidates should ideally possess an engineering degree and/or have had practical experience in the engineering or transport industries although those with alternative experience would be considered. A general interest in transport would be welcomed from those candidates without particular professional experience.

Salary: £3,279-£5,493 plus £312 supplement plus April, 1977, pay award.

For application form and further particulars please apply in writing enclosing a foolscap stamped and addressed envelope to the Assistant Secretary (Personnel), Lanchester Polytechnic, Priory Street, Coventry CV1 5FB, returnable by 24th October, 1977.

### LANCHESTER POLYTECHNIC

Coventry - Rugby

**FACULTY OF APPLIED SCIENCE**

**Lecturer Grade II**

in Physical Geography (2 posts)

Salary: £3,279-£5,493 plus £312 supplement plus April, 197, award.

For application form and further particulars please apply in writing enclosing a foolscap stamped and addressed envelope to the Assistant Secretary (Personnel), Lanchester Polytechnic, Priory Street, Coventry CV1 5FB, returnable by 3rd October, 1977.

### KINGSTON POLYTECHNIC

School of Sociology

**LECTURER II/SENIOR LECTURER in SOCIAL WORK**

Required to join a team teaching on a CQSW course for mature students.

Applicants must be qualified in social work, although recently qualified persons will be considered, and have appropriate academic qualifications. A degree in one of the Social Sciences and an interest in Mental Health would be an advantage. To start 1 January, 1978. Salary range £3,068-£7,026 inc. London allowance plus award in accordance with current pay policy.

Further details and application forms (to be returned by 10 October) from Appointments Officer, Kingston Polytechnic, Penrhyn Road, Kingston upon Thames KT1 2EE.

### NELP North East London Polytechnic

Faculty of Human Sciences
Livingstone House
Department of Sociology

**Lecturer in Medical Sociology (Grade II)**

*(Readvertisement)*

Applicants are invited from good Honours graduates with research and/or relevant professional experience for a Lecturer II post in Medical Sociology. A serious interest in the sociological and psychosocial aspects of health care is an essential requirement. (Ref. S/AO 304A).

Faculty of Science
West Ham Precinct
Department of Paramedical Sciences
Division of Physiology/Pharmacology

Required from January, 1978:

**Lecturer II/Senior Lecturer in Pharmacology**

With special interest in the Central Nervous System, to teach on the following courses: B.Sc. Applied Biology (Sandwich and Part-time), M.Sc. Pharmacology, HNC/D Applied Biology. Candidates should have an appropriate first degree, and other relevant research, teaching or industrial experience. A higher degree is desirable. (Ref. S/AO 304B).

Salary Scales: Lecturer II, £3,279-£5,493 p.a.
Senior Lecturer, £5,031-£6,417

(Plus appropriate Government Supplements of up to a maximum of £492 and applicable London Allowance).

Further details and application form from:
The Senior Staffing Officer (2), North East London Polytechnic, Forest Road, London E17 4JB.
Telephone: 01-527 2272 (ext. 20).

Closing date: 7th October, 1977.

NELP North East London Polytechnic

### LANCHESTER POLYTECHNIC

Coventry - Rugby

**FACULTY OF SOCIAL SCIENCE**

**Lecturer Grade II in Accountancy**

Salary: £3,279 £5,493 plus £312 plus April, 1977, supplements.

For application forms and further particulars please apply in writing enclosing a foolscap stamped and addressed envelope to the Assistant Secretary (Personnel), Lanchester Polytechnic, Priory Street, Coventry CV1 5FB, returnable by 5th October, 197.

### Lecturer II in Education Management

Based at Danbury Park, Chelmsford, to work on post-graduate and post-experience diploma and in-house programmes in education management for schools, colleges and local authority senior staff, with special reference to Curriculum and Organisation Behaviour in the Schools sector. The post offers an exciting opportunity for those with management expertise in schools to transfer into Education Management Teaching. Higher degree in behavioural sciences required, with relevant experience in education. Informal discussion may be held with Geoffrey Lyons or John Davies at Danbury Park (024 841 2141). (Ref. S/AO.303)

Salary Scale: Lecturer II—£3,279-£5,493

(Plus appropriate Government Supplements of up to a maximum of £492)

Further details and application form from: The Senior Staffing Officer (2), North East London Polytechnic, Forest Road, London E17 4JO Telephone: 01-527 2272 Extension 20.

Closing date: 3 October, 1977.

ARMC Anglian Regional Management Centre

NORTH EAST LONDON POLYTECHNIC - ESSEX COUNTY COUNCIL

### LEICESTER POLYTECHNIC

COMPUTER CENTRE

(User Support Group)

**INFORMATION & ADVISORY OFFICER**

£4,230-£4,545 plus pay supplements of up to £520 p.a.

This is a senior post concerned with leading the full range of information services available to users of the Centre, involving documentation, training and advisory functions. Applicants should preferably hold a degree or similar and have appropriate experience.

**APPLICATIONS PROGRAMMER**

£2,529-£3,282 plus pay supplements of between £454-£492 p.a.

This post involves a wide range of applications arising from the different faculties of the Polytechnic. Previous experience an advantage but recently qualified graduates or similar will be considered.

Further details and applications form available from: Staffing Officer, Leicester Polytechnic, P.O. Box 143, Leicester, LE1 9BH. Tel. Leics. 50181 Extn. 2301. Closing date 30 September, 1977.

## Polytechnics continued

### Leicester Polytechnic

require

**Professor of Business Finance**

and Head of the School of Economics and Accounting

The appointee will be expected to develop the teaching, research and consultancy in Business, Economics and Accounting Studies and offer a specialism in an applied field related to this work.

SALARY £8520–£9093 (inclusive).

Further particulars and application form from Staffing Officer, Leicester Polytechnic, P.O. Box 143, Leicester, LE1 9BH. Tel. Leics. 50181 extn. 2301. Closing date 14.10.77.

### BRISTOL

THE POLYTECHNIC

DEPARTMENT OF CONSTRUCTION AND ENVIRONMENTAL HEALTH

ASSOCIATE LECTURER (HALF LECTURER II/SENIOR LECTURER (HALF-TIME) IN BUILDING TECHNOLOGY

Applications invited for the above post, duties to commence as soon as possible and terminate on August 31, 1978. The appointment is being made to replace a member of staff on sabbatical leave.

Candidates should be GRADUATE and or members of an appropriate professional body with experience in the Construction industry or its related professions.

Previous teaching experience would be advantageous but is not essential. The successful candidate will be concerned with the teaching of courses at professional and Higher Technical level in the department. There will also be a limited commitment to administrative duties relating to the above courses.

The salary will be 50 per cent of the full-time scale. Full-Time Salary Scale £5,031 (bar)—£5,955 (bar)—£6,417 plus £312 supplement plus Phase 2 award.

Further details and application forms (to be returned by October 7, 1977) from Personnel Office, Bristol Polytechnic, Coldharbour Lane, Bristol BS16 1QY. Please quote Post Reference Number [illegible] in all communications.

### HERTFORDSHIRE

THE HATFIELD POLYTECHNIC

SCHOOL OF ENGINEERING

RESEARCH FELLOW

Applications are invited from MATERIALS SCIENTISTS or TECHNOLOGISTS to undertake research on the structure of hardened cement paste and concrete, and the penetration of moisture and other deleterious substances. The successful applicant will be given a considerable degree of responsibility for the initiation and supervision of the research but previous experience of cementitious materials is not essential.

The project is supported by the Science Research Council for a period of three years. Applicants should preferably hold a Ph.D. and the salary will be on the Lecturer II scale with a maximum starting level of £4,818 plus supplementation and national insurance. The salary offered will be in accordance with qualifications and experience.

Informal enquiries to Dr. J. M. Illston, Director of Studies in Civil Engineering, Hatfield (30) ext. 309.

Further details and application forms may be obtained from the Staffing Officer, The Hatfield Polytechnic, P.O. Box 109, Hatfield, Herts, or telephone Hatfield 68100, ext. [illegible].

Please quote reference [illegible]. Closing date: 30th September.

### LEICESTER

THE POLYTECHNIC

SCHOOL OF ECONOMICS AND ACCOUNTING

Applications are invited for appointment of LECTURER II/SENIOR LECTURER in BUSINESS STUDIES.

[illegible]

Salary: £3,741 to £6,447 [illegible]

Application forms and further particulars obtainable from the Staffing Officer, P.O. Box 143, Leicester, LE1 9BH.

### LONDON

THAMES POLYTECHNIC

SCHOOL OF BUSINESS ADMINISTRATION

LECTURER II IN LAW

Applications are invited from good honours graduates in Law preferably with commercial or professional experience. Teaching will be mainly at degree and diploma level. Candidates will have an interest in commercial and industrial law, and will develop the expertise in the field of European Business Law.

Salary scale: £3,993 to £5,207 gross inclusive + 1977 Burnham award.

Further particulars and form of application may be obtained from the Staffing Officer, Thames Polytechnic, Wellington Street, London SE18 6PF, to whom completed applications should be returned as soon as possible.

### SHEFFIELD CITY POLYTECHNIC

DEPARTMENT OF URBAN & REGIONAL STUDIES

LECTURER II/SENIOR LECTURER in LAND VALUATIONS and URBAN ESTATE MANAGEMENT

Salary Scale: Senior Lecturer £5,523-£6,117 (bar)-£6,909; Lecturer II £3,744-£5,985.

Applications are invited from CHARTERED SURVEYORS to teach Valuations (including Rating) and Urban Estate Management at degree and post graduate levels. Research interest is most desirable.

The successful applicant will have professional experience and must be a graduate in Estate Management and/or Chartered Surveying (General Practice Division) of the R.I.C.S.

Closing date, October 7, 1977.

DEPARTMENT OF GEOGRAPHY AND ENVIRONMENTAL STUDIES

RESEARCH ASSISTANT FOR THE GEOGRAPHY CURRICULUM PROJECT

Salary Scale: £2,340-£3,030 including supplements.

Applications are invited for this post. The project will involve a study of local teachers' geography curriculum design and a follow up of work in the classroom. It would be an advantage for applicants to have had some teaching experience. The post is available for two years.

Closing date, October 7, 1977.

Requests for application forms in writing, please, to the Personnel Department (Dept. THES), Sheffield City Polytechnic, Halfords House, Fitzalan Square, Sheffield S1 2BB.

### SUNDERLAND

THE POLYTECHNIC

FACULTY OF ENGINEERING

DEPARTMENT OF ELECTRICAL, ELECTRONIC AND CONTROL ENGINEERING

RESEARCH ASSISTANTSHIP IN UNDERWATER COMMUNICATIONS

Required to investigate interactive signal processing with a mini computer system and its application to sonar.

The successful applicant will be expected to register for a higher degree. This appointment is for two years in the first instance, with a possibility of an extension.

The salary for Research Assistants is £2,301 by £138 to £2,715 plus £312 Phase I and II supplements.

An application form and further particulars may be obtained from the Staffing Officer, Sunderland Polytechnic, Chester Road, Sunderland SR1 3SD, and should be returned as soon as possible.

### THAMES

THE POLYTECHNIC

SCHOOL OF SURVEYING

DIVISION OF LAND USE AND PLANNING

SENIOR LECTURER IN VALUATIONS

Applications are invited from chartered surveyors for this full-time post; relevant graduate and or postgraduate qualifications would be an advantage. The School offers full-time B.Sc. degree courses in Estate Management, Building Surveying and Quantity Surveying and part-time courses up to final examinations level of the professional institutions.

The person appointed will join a multi-disciplinary team and the post affords an opportunity to engage in the research activity of the School, which includes consultancy research with professional bodies.

The work of the School is currently carried out at Vencourt House, King Street, Hammersmith, London W6, but in September 1978 will be transferred to Woolwich.

Salary scale: £5,745 to £6,061 (bar) to £7,155 gross inclusive plus 1977 Burnham award.

Further particulars and form of application may be obtained from the Staffing Officer, Thames Polytechnic, Wellington Street, London, SE18 6PF, to whom completed applications should be returned by 11 October 1977.

### THAMES

THE POLYTECHNIC

DIVISION OF PHILOSOPHY

PART-TIME LECTURER

The Division requires a part-time lecturer for the session 1977-78 to teach the Philosophical Logic and the Philosophy of Science. Letters of application to Head of School of Humanities, Thames Polytechnic, Wellington Street, London SE18 6PF to be received by 3 October, 1977.

### LONDON

THE POLYTECHNIC OF CENTRAL LONDON

SCHOOL OF ENGINEERING AND SCIENCE

ENGINEERING DIVISION

SENIOR LECTURER IN ENGINEERING

Required with expertise in some aspects of the following areas in order that they may make a specialist contribution to the Honours Degree and Master Courses.

(1) Communication Engineering such as statistical communication theory, computer and digital systems, data communication.

(2) Electrical Engineering with particular emphasis on power electronics or electronic control, instrumentation in power systems.

(3) Systems Engineering such as computer control systems, computer aided design. Candidates will be encouraged to undertake research.

Salary: £5,031 to £5,955 (bar) to £6,417 plus £402 London allowance and £492 supplement.

Details and application form from The Establishment Officer, PCL, 309 Regent Street, London W1R 8AL. 01-580 2020 Ext. 212. Closing date, 30 September, 1977.

### BRISTOL

THE POLYTECHNIC

Applications invited for the post of:

FACULTY OFFICER (AP5: £3,895 to £4,098 plus supplements of £312 and 5 per cent)

To act as SECRETARY to the Boards of Studies of the Faculties of Accounting, Business and Management and Humanities, Social Sciences, Languages and Law, and to undertake other related duties including further committee servicing as a senior member of the Academic Registry.

Further details and application forms (to be returned by 7th October, 1977) from Personnel Officer, Bristol Polytechnic, Coldharbour Lane, Bristol BS16 1QY. Please quote Post Reference Number A3160-16.2 in all communications. (Previous applicants need not re-apply, but will be considered.)

### LONDON, S.E.18

THAMES POLYTECHNIC

SCHOOL OF BUSINESS ADMINISTRATION

SENIOR LECTURER/LECTURER II IN ACCOUNTING

Applicants must be qualified ACCOUNTANTS, preferably graduates, with relevant practical experience, with an interest in teaching in one or more of the following areas: financial accounting, management accounting, business finance, data processing. The person appointed will develop the use of computing and technical facilities in the teaching of accounting. The appointment is to commence on 1 January, 1978. The School of Business Administration offers a wide variety of courses including C.N.A.A. degrees and a Foundation Course.

Salary Scale within the range £3,993 to £7,155 gross inclusive plus 1977 Burnham award.

Further particulars and form of application may be obtained from the Staffing Officer, Thames Polytechnic, Wellington Street, London SE18 6PF, to whom completed applications should be returned as soon as possible.

### MIDDLESEX

THE POLYTECHNIC

COURSE SECRETARY £3,696 to £4,073

A responsible post providing administrative and secretarial facilities for two major art and design degree courses. Based at Cat Hill, Cockfosters, the Polytechnic's main art and design courses location. You would be responsible for the day to day running of a very busy course office and will have extensive contact with academic and non-teaching staff and outside organisations and individuals. You will be expected to take a leading part in the establishment of new expenditure control systems.

You must be able to demonstrate sound management ability, possess first class secretarial skills, and preferably have a strong educational record or substantial experience of administration, probably in education.

Write for full details and an application form, posting first class to: Appointments Officer (Ref. 60 1D), Middlesex Polytechnic, Bounds Green Road, London N11 2NQ, to whom completed forms should be returned by October 5.

## Colleges of Higher Education

### the College of Ripon & York St John

**COLLEGE OF RIPON AND YORK ST. JOHN**

**LIBRARIAN**

Applications are invited from appropriately qualified and experienced candidates for the appointment of Librarian in this Church of England Voluntary College of Higher Education (1,600 men and women). The appointment, which becomes vacant on the retirement of the present Librarian, will commence on 1st January, 1978, or as soon after as possible. The College, which was formed in 1975 through the amalgamation of The College, Ripon with St. John's College, York, offers courses leading to the award of the Certificate in Education, the Diploma in Higher Education, the Post-Graduate Certificate in Education, the B.Ed. and B.A./B.Sc. (Collegiate) degrees of the University of Leeds and the Diploma of the British Association of Occupational Therapists.

The Librarian is responsible for all library services on both campuses. The appointment will be at Principal Lecturer Grade (£5,940 plus £312 plus £180 to £6,642 plus £312 plus £100). Further details and application forms may be obtained from the Principal, College of Ripon and York St. John, Lord Mayor's Walk, York YO3 7EX, to whom completed application forms should be returned to arrive not later than Monday, 17th October, 1977.

### Hull College of Higher Education

Cottingham Road Hull HU6 7RT
Telephone (0482) 41451

**THE SCHOOL OF HUMANITIES AND COMMUNITY EDUCATION**

This school of 28 full-time academic staff is responsible for the teaching, administration and extension of the recently validated Dip HE course, a variety of Art, Drama and Music Community courses, and the College Foundation course in Music. A major planned development in this school, upon which staff are currently engaged, is a degree in Combined Studies as part of a broader development including degree courses in Social Studies and Education. To assist with current programmes and contribute to the future developments the school wishes to appoint a

**LECTURER I (OR SENIOR LECTURER) IN ENGLISH LITERATURE**

Candidates should have a main interest in literature of the 19th/20th Centuries, show a sociological and/or historical interest bias and have experience in teaching on interdisciplinary courses at a high level.

For further particulars and application forms contact Mrs. O. Liddell at the above address, to whom completed forms should be returned within two weeks of the appearance of this advertisement.

This College is formed from an amalgamation of Colleges of Art Commerce Education Nautical Studies and Technology.

### Hull College of Higher Education

Cottingham Road Hull HU6 7RT
Telephone (0482) 41451

**FACULTY OF ADMINISTRATIVE AND MANAGEMENT STUDIES**

The Faculty has 67 full time academic staff and over 700 full time equivalent students. It currently provides a wide range of full time and part time business, professional and management courses including BA(Hons) Business Studies, DMS, ICSA, HND Business Studies, etc., and contributes vitally to the College's major programme of development of CNAA degree and other advanced courses.

**SL in ACCOUNTANCY**

**SL or LII in ECONOMICS**

**SL or LII in INDUSTRIAL SOCIOLOGY**

**SL or LI in PERSONNEL MANAGEMENT**

To assist with this development work and teach on existing courses staff are sought for the following posts:
For further particulars and application forms write to Mrs. D. Liddell at the above address to whom completed forms should be returned within 14 days of the appearance of this advertisement.

This College is formed from an amalgamation of Colleges of Art Commerce Education Nautical Studies and Technology

### COUNTY OF AVON

Applications are invited for appointment as soon as possible to the following posts:

**1. Lecturer, Grade II**

to teach Fashion Design to students taking B.Ed. degree courses in Dress and Textiles. Applicants should be suitably qualified Fashion/Textile designers.

**2. Lecturer, Grade II**

in the Department of Home Economics and B.Ed. Dress and Textiles. Industrial experience would be an advantage.

Salary scale at present £3,279 to £5,493 per annum (plus supplement of £492 per annum). Further particulars from The Principal, Bath College of Higher Education, Sion Hill Place, Bath, BA1 5SJ.

## Fellowships and Studentships

### University College Galway

**Fellowship in Pharmacology**

Applications are invited for the above Fellowship from those with a Ph.D. or equivalent in Pharmacology. The tenure of the Fellowship will be 12 months commencing October, 1977, at an annual stipend of £3,500. The successful applicant will be expected to assist in the teaching of Pharmacology to medical students and to undertake research within the Department. Preference will be given to candidates with an interest in Neuropharmacology. Applications (including three copies of curriculum vitae and the names of three referees) should be lodged not later than 3rd October, 1977, with the Registrar from whom further details may be obtained.

### LONDON

IMPERIAL COLLEGE OF SCIENCE AND TECHNOLOGY

BEIT FELLOWSHIPS FOR SCIENTIFIC RESEARCH

Applications are invited for fellowships tenable at Imperial College from 1 September 1978 for a maximum of two years. These fellowships are intended for young scientists or engineers considered likely to become research workers of above average ability. Fellows will be under the supervision of a Professor and will undertake research approved by the trustees. Candidates will be under 25 at the date of election. They should hold a degree taken in any faculty in any university approved by the trustees, or any diploma or associateship of any college approved by the trustees, in a territory which was on 20 September 1913 part of the British Empire or which is for the time being part of the British Commonwealth.

Further details and an application form are obtainable from the Registrar, Imperial College of Science and Technology, London SW7 2AZ, to which applications should be returned by 1 January, 1978.

### NEWCASTLE UPON TYNE

THE UNIVERSITY

SCHOOLS FELLOWSHIP

Applications for the Schools Fellowship for the academic year 1978-79 are invited from active, experienced members of the teaching profession whose employing authority is likely to agree to secondment with full salary for one or more terms. This opportunity is offered for study or research on topics of interest to the applicant's school and the University.

Further particulars and application forms may be obtained from the Registrar of the University, 6 Kensington Terrace, Newcastle upon Tyne NE1 7RU with whom completed application forms must be lodged not later than October 25, 1977.

### WARWICK

THE UNIVERSITY

POSTDOCTORAL RESEARCH FELLOW, BIOLOGICAL SCIENCES

Applications are invited for a Postdoctoral Research Fellowship in the Virus Research Group to work in a team led by Professor D. C. Burke on the purification of interferon messenger RNA and the isolation of the corresponding DNA sequences. Candidates should have a background in nucleic acid hybridisation procedures or nucleic acid biochemistry. The appointment is for three years.

Initial salary will be up to £4,165 per annum on the Range 1A scale, £3,333 to £5,227 per annum.

Further details and application forms from the Academic Registrar, University of Warwick, Coventry CV4 7AL, quoting Ref. No. 6/30/77, to whom applications should be sent as soon as possible.

## Adult Education

### ADULT COMMUNITY STUDIES

HEAD of DEPARTMENT of SOCIAL and COMMUNITY STUDIES required. Existing programme of adult education in social concern and training volunteers in many fields. Also supervising local Urban Programme Worker. Minimal teaching, more planning, contacts and innovating.

Salary on Lecturer II scale about £3,500 to £5,300 negotiable by qualification and experience.

Full details from Principal, Morley College, 61 Westminster Bridge Road, London, S.E.1. Telephone 01-928 8501.

## Colleges and Institutes of Technology

### LOTHIAN REGIONAL COUNCIL

NAPIER COLLEGE OF COMMERCE AND TECHNOLOGY

LECTURER (A) IN COMPUTER STUDIES

Salary on Scale £3,690 to £6,525 (bar) to £7,000.

The Lecturer appointed will be concerned mainly with commercially based courses for certificates, diplomas and degrees. Interests should include the design and implementation of computer-based information systems; specialisation in data-base techniques, teleprocessing or communication networks and associated software would be an advantage. Previous industrial or commercial experience in the design and implementation of commercial computer-based systems would be an advantage.

The computer unit has an ICL 1902A disc-based computer and a large CTL Modular 1 mini-computer with interactive facilities.

Applicants should possess an honours degree or equivalent professional qualifications.

Further particulars of post and application forms from: The Academic Registrar, Napier College of Commerce and Technology, Colinton Road, Edinburgh, EH10 5DT.

## Colleges and Institutes of Technology continued

**DUNDEE COLLEGE OF TECHNOLOGY**

### SENIOR LECTURESHIP IN QUANTITY SURVEYING

Applications are invited from persons with substantial teaching and professional experience. The person appointed will be required to be responsible, in the capacity of Course Leader, for the operation and development of a Degree course in Quantity Surveying recently validated by CNAA. Applicants must have a thorough knowledge of the nature of undergraduate education, possess appropriate academic qualifications, preferably at post-graduate level; and hold corporate membership of a relevant professional institution.

Salary (at present under review) on the scale £8,312-£7,047 (bar) —£8,028, with initial placing dependent upon prior experience. Financial assistance towards the cost of removal expenses may be payable.

Further particulars and application form obtainable from the Administrative Assistant (Establishment), Dundee College of Technology, Bell Street, Dundee, DD1 1HG, to whom completed application forms should be returned by 3 October, 1977.

## Colleges of Education

### STRANMILLIS COLLEGE BELFAST

Stranmillis College is a College of Education, of about 1,000 students, who are preparing to teach in nursery, primary and secondary schools through the Certificate (3 years), B.Ed. (3 and 4 years), and Post-Graduate (1 year) courses. The College is non-denominational: there is no religious test.

The College is pleasantly situated in an attractive wooded estate of some 45 acres, in a quiet residential neighbourhood on the southern outskirts of the City of Belfast. New building projects to the value of £2½ million have been completed in the last few years.

### LECTURER OR SENIOR LECTURER IN EDUCATION

Applications are invited from good honours graduates with successful teaching experience for appointment from January 1st, 1978, or as soon as possible. It will be an advantage to be able to offer specialist contribution in one or more of Comparative Education, Philosophy of Education, Psychology of Education.

Salary Scales: Lecturer/Senior Lecturer, £3,279 to £8,417 p.a. plus £312 p.a., plus a further increase under the Pay Code from April 1st, 1977.

Assistance with removal expenses from outside Northern Ireland.

Further information about the College and the appointment, and a form of application, may be obtained from: The Secretary, Stranmillis College, Belfast BT9 5DY.

Applications should be received by the Secretary not later than September 28th, 1977.

## General Vacancies

**ilea** INNER LONDON EDUCATION AUTHORITY

### Inspector of Further and Higher Education

(DISTRICT RANK)

### for Fashion and Creative Crafts

required to inspect and develop this work in Adult Education Institutes and in Colleges of Further and Higher Education.

Applicants should have a recognised design qualification and relevant teaching experience.

Salary range: £8,888-£9,734 (inclusive of London Weighting) with possible progress to £10,754.

*Details and application forms from the Education Officer (EO/Estab 2A/t) Addington Street Annexe, The County Hall, London SE1 7PB. Please enclose a stamped addressed foolscap envelope.*
*Forms to be returned by 7 October 1977.*

*Britannia Royal Naval College, Dartmouth*

### DIRECTOR OF STUDIES

**£10,000**

The Director is responsible for directing the work of some 30 Lecturers in the Departments of Science, Engineering Science, Mathematics, History (Strategic Studies and Economics) and Languages. He has overall responsibility for the academic work of up to 500 young officers in residence at Dartmouth, and for the selection of officers for university degree courses.

Candidates (men and women) should preferably be graduates in the 45–55 age range and be broadly based as educationalists with considerable experience at secondary or tertiary level. They should have good contacts with schools and universities and must have intellectual and personal qualities which will command the respect of students and staff at BRNC and of Senior Service Officers. Experience of, or affinity for, the Navy would be an asset.

Staff play a full and active part in all College activities.

The post is permanent and pensionable and will be available in September 1978, when the present incumbent retires. A residence will be available at an economic rent.

For further details and an application form (to be returned by 6th October 1977) write to Civil Service Commission, Alencon Link, Basingstoke, Hants RG21 1JB, or telephone Basingstoke (0256) 68551 (answering service operates outside office hours). *Please quote ref G/0962/3*

### HM Inspector of Schools

#### Higher and Further Education

Applications are invited from men and women, preferably aged between 35 and 45, for appointment as HM Inspectors to work mainly in the field of higher and further education, including universities. All HMIs undertake general duties as well as specialist work. Candidates should therefore have an interest in higher and further education generally and not only in the specialists areas listed below.

**AGRICULTURE**
The agricultural specialist will be concerned with maintained and direct grant institutions which provide courses of further and higher education in agricultural subjects including commercial and amenity horticulture, forestry and the rural environment. Applicants should have relevant qualifications and experience.

**BUSINESS STUDIES**
Applicants should have good academic qualifications in economics and substantial experience of teaching economics at an advanced level in further or higher education. A period of employment outside the teaching profession would be an advantage.

**GENERAL EDUCATION**
Applicants should have sound experience in the general and vocational education of young people over 16. Has particularly qualifications may be in the humanities, the social or physical sciences, or in technology. Experience of curriculum development and of general/liberal studies would be an advantage.

**HOME ECONOMICS AND ALLIED SUBJECTS**
Applicants should have a degree or diploma in home economics or a related area together with experience of teaching in further or higher education. Relevant industrial experience would be an advantage as the work will involve all aspects of home economics of craft, technician and professional level.

**SOCIAL SCIENCES**
Applicants should have a degree in sociology or the social sciences, or qualifications and experience in social work, and have relevant teaching experience in further or higher education. An interest in the social education of young people would be an advantage.

Starting salary will fall in the range £6,022 to £9,415 (higher in exceptional cases) for appointments as specialists. Higher points are normally filled by promotion. Application forms (to be returned by 14 October) and further information may be obtained from Mrs D. C. Taylor, Department of Education and Science, Room 10/7, Elizabeth House, 38 York Road, London SE1 7PH, telephone number 01-928 9222 extension 2237. Please quote G/776.
DEPARTMENT OF EDUCATION AND SCIENCE.

**STRATHCLYDE** REGIONAL COUNCIL

DEPARTMENT OF EDUCATION
FURTHER EDUCATION

Applications are invited for the undermoted post at Glasgow College of Technology, Cowcaddens Road, Glasgow G4 0BA.

### Civil Engineering Lecturer 'A'

Honours degree in Engineering and experience in one or more of the following: Soil Mechanics, Construction, Structural esign, Offshore Engineering. An interest in research in one of the above topics would be advantageous.

Teacher Training would be an advantage but training will be given on an in service basis if necessary.

Salary Scale: Lecturer 'A' £3,216 (£478)—£4,110 (£511*)—£6,402 (£514*).

*Figures in brackets are Charge Land Phase II supplements which should be added to the salaries shown. Placing on salary scales will be given for relevant experience.

*Forms of application and further particulars can be obtained from the Principal of the College, to whom completed forms should be returned not later than Friday, 30th September, 1977.*

Edward Millar, Director of Education

### COUNCIL FOR NATIONAL ACADEMIC AWARDS

### Appointment of REGISTRAR

Applications are invited for the post of
**Registrar for Quinquennial Reviews.**

In addition to validating individual courses, the Council also undertakes review of institutions offering courses leading to its awards, on complete entities, either at the stage of approving a course for the first time or on a quinquennial basis. The person appointed to this post will have responsibility for the organisation and administration of these reviews.

Candidates for this post should be well qualified academically and should have had appropriate teaching and/or academic administrative experience.

The salary on appointment will be within the scale £8,333-£8,864 (including London Weighting).

Further particulars of the post may be obtained from:
The Secretary (O.R.),
Council for National Academic Awards,
344/354 Grays Inn Road, London WC1X 8BP,
to whom applications should be submitted by 7 October, 1977.

### CALOUSTE GULBENKIAN FOUNDATION

UNITED KINGDOM & COMMONWEALTH BRANCH

### CO-ORDINATOR

FOR COMMUNITY WORK & INNER CITY SELF-HELP PROJECTS

Applicants should possess a good degree, professional qualifications in social or community work or a comparable field, and administrative experience including community work, policy formulation, budgetary control and communication skills. Starting salary within £5,900-£6,000 according to experience. Appointment for three years in first instance. Applications not later than 10th October. For further particulars, etc., write to Peter Benson, Esq., Director, Calouste Gulbenkian Foundation, U.K. & Commonwealth Branch, 98 Portland Place, London W1N 4ET.

### BRITISH FILM INSTITUTE

### HEAD OF EDUCATIONAL ADVISORY SERVICE

The Educational Advisory Service is the Institute's principal point of contact with organised education at all levels. Its activities include advising teachers and training to control and arrange curriculum teaching projects, producing study materials and publications, and providing a lecture service.

The Head of Department is responsible for managing and developing those activities and is a member of the Institute's Executive. It is hoped that a research assistant will be added to the work of the department, and the Head of Department will have overall responsibility for establishing research arrangements and orientations. Candidates should have good educational experience, well informed knowledge of current debates in film, television and other media in general, and be capable organisers with expertise of general education.

Starting salary £7,670, on a scale rising to £8,788 (including supplements). Application forms and further information from Personnel Department, 81 Dean Street, London W1V 6AA. Tel.: 01-437 4355. Closing date 7th October, 1977. Interviews will be held towards the week of the 17th October.

### SCHOOLS LIAISON OFFICER

As extra member of staff is needed to contribute to a small team engaged in interesting and varied activities concerned with fostering school/industry links. The successful candidate will be primarily concerned with a new scheme which allows teachers to gain industrial experience, and this will involve considerable contact with schools, industry, local authorities and the general public.

The successful applicant will combine a degree with good administrative skills, will be able to devise and control activities, and will be able to communicate effectively at senior level in industry and in education. A few years experience, preferably in industry, is essential, and candidates will be expected to operate with minimum supervision. Some travel throughout the UK is involved and an ability to drive is therefore essential.

The salary will depend on experience and qualifications and other benefits include luncheon vouchers and a pension scheme.

Please reply, with full details, to Mr F. A. Jones (SLS), The Institution of Mechanical Engineers, PO Box 23, Northgate Avenue, Bury St Edmunds, Suffolk.



## General Vacancies continued

**Citizens Advice Bureau**

NATIONAL ASSOCIATION OF CITIZENS ADVICE BUREAUX

### ASSISTANT LEARNING RESOURCES OFFICER

To work within a small unit preparing training materials, both for individual study and for training courses.

Editorial and writing skills, experience in the design of algorithms, and an understanding of the way adults learn, are all relevant to the post. Experience in journalism, publishing or adult education would be useful.

Salary 3,324-£4,420, inclusive of London Weighting, but unlikely to be above £3,924 initially. Employment in the first instance will be until March, 1979, but may then be renewable.

Further details and application form from the Administrator, National Council of Social Service, 26 Bedford Square, London WC1B 3HU. 01-636 4066. If you would like to discuss the job, telephone Ruth Valentine, at the above number. Closing date 7 October, 1977.

### PART-TIME TUTORS WANTED

A professional tutorial firm in London requires part time tutors to assist with preparing course manuals and assisting with lecturing for Law Society Part II Commercial Law and other subjects. Please reply giving details of experience to Box 0667, The Times, mounela

**LONDON, E.6 and S.E.18**
THE GEORGE TAYLOR DESIGN SERVICES

[illegible]

**LONDON**
Chaplaincy team in Polytechnic. Rector (Rev. Edith Mercier) for one year and an Assist. Methodist Superintendent in East London.
Rev. G. Joiner, S.E.D., Livingstone House, Stratford, London, E15 2LJ.

**LONDON**
INNER LONDON EDUCATION AUTHORITY

CAREERS OFFICER
Qualified Careers Officer with high level of interest in employment, training and recreational matters in this specialist post to help implement a young people's unit in Lewisham and Greenwich. The person appointed will have the opportunity to transfer to the Inner London Education Authority's Careers Service.
Salary scale £3,912-£4,110 (£198) Minimum of London Weighting and Phase 1 and 11 supplements.
Details and application forms from the Education Officer (EO/Estab 2A/t), County Hall, London SE1 7PB. Please enclose a stamped addressed foolscap envelope.
Forms to be returned by September 30, 1977.

## Appointments Wanted

**LONDON, N.W.3**

[illegible]

**PART-TIME APPOINTMENT WANTED**
[illegible]

## Colleges of Further Education

### HARROW COLLEGE OF TECHNOLOGY AND ART

*Northwick Park, Harrow, HA1 3TP*
*Tel. 01-864 4411*

### FACULTY OF ART AND PHOTOGRAPHY

### *Principal Lecturer in Information Graphics*

Applications are invited from practising designers with proven administrative ability and experience of teaching at degree level.

The successful applicant will become the Course Director for the present three year full-time College Higher Diploma in Information Graphics, and will be required to take a leading part in the planning and development of the proposed BA(Hons) in Information Graphics which is to be offered in association with the Polytechnic of Central London.

Salary: £5,940 to £7,578 (bar at £6,642)
plus £492 supplement
and £402 London Allowance

*Further information and applications forms may be obtained from the Principal's Office (Ext. 34 or 35) to whom completed applications should be returned within 14 days of the appearance of this advertisement.*

## Overseas

The New South Wales Institute of Technology
SYDNEY, AUSTRALIA

The New South Wales Institute of Technology is a corporate institution established to provide a wide range of professional courses for those entering or already employed in industry, government and technological fields.

### Faculty of Business Studies

The Faculty of Business Studies currently offers a Bachelor of Business degree with concentrations in accounting, marketing, operations management and public administration. In addition, in 1977 the Graduate Diploma in Accounting and the Graduate Diploma in Personnel Management/Industrial Relations were introduced and it is anticipated that expansion of graduate courses will proceed in the near future.

Total current enrolment within the Faculty approximates 2,600 students. Administratively the Faculty is organised into four Schools of Accounting, Business and Public Administration, Finance and Economics, and Marketing. Applications are now invited for the positions of Head, School of Finance and Economics and Head, School of Marketing.

The position of Head of School carries with it the responsibility for the academic leadership of the staff of the School and day-to-day operation of the instructional and research work. As Head of School the appointees will be, ex-officio, members of the Academic Board and the Faculty Board and may be called upon, in the future, to assume the duties of the Dean of the Faculty.

**HEAD, SCHOOL OF FINANCE & ECONOMICS**
The School anticipates offering an area of concentration within the Bachelor of Business degree in Applied Economics. Further, a Graduate Diploma in Finance is being planned for introduction in the near future. The School will further be offering Finance and Economic subjects in other Graduate courses that are being offered within the Faculty of Business Studies.

The appointee should possess a doctorate (or equivalent) and should have professional experience at an appropriate level in higher education in the Business Studies field. His experience will have been obtained by lecturing and/or administering in a Faculty of Business Studies at a recognised University or Polytechnic.

It is desirable that the Head of the School will have had substantial business experience. Alternatively the appointee may have served as a consultant to business or to government.

**HEAD, SCHOOL OF MARKETING**
The School offers a field of concentration of Marketing within the Degree of Bachelor of Business and offers Marketing subjects to all students taking this degree. It will further be offering Marketing subjects in other Postgraduate courses that are being developed in the Faculty of Business Studies.

The appointee should possess qualifications in the Post-Graduate level in Business Studies with emphasis in the field of Marketing and should have professional experience at an appropriate level in higher education in the Business Studies field. This experience will have been obtained by lecturing and/or administering in a Faculty of Business Studies at a recognised University or Polytechnic.

It is desirable that the Head of the School will have had business experience, acquired in a responsible position in a company of some significance. Alternatively he may have acted as a consultant to business or to government.

The Faculty of Business Studies presently academic staff to undertake limited professional consulting for industry and commerce. Opportunities for research work are available.

Academic salaries are under review but are currently $A27,924 or approximately £Stg17,475 per annum.

The position of Head of the School carries tenure and provides for superannuation, long service leave and a Housing Loan Scheme. Fares and a contribution towards removal and initial accommodation expenses are provided for overseas appointees. A Study Leave Scheme is also available.

Applications close October 14, 1977. Applicants should arrange for three confidential referees' reports to arrive by the same date. Written applications should include address, phone number, personal particulars, documentary evidence of qualifications, work and teaching experience, affiliations, publications, research work undertaken and the names and addresses of the referees contacted. Applications and referees' reports are to be sent to:—

The Agent-General for New South Wales,
N.S.W. Government Offices,
66 The Strand,
London, WC 2N 5LZ ENGLAND

The European University Institute is looking for an administrator of university level for its academic affairs department. The person wanted should have several years' experience in the area of university administration.

He/she will be responsible for providing the secretarial services for the Academic Council, drafting documents for it and for the High Council of the Institute, organizing the recruitment of research students and producing the annual prospectus, etc.

He/she must also be able to draw up regulations. International experience would be desireble, to facilitate the necessary contacts with the administrations of the various EEC countries.

He/she will work in close collaboration with the other departments, under orders from the Secretary and the Principal.

A thorough knowledge of at least two of the Institute's official languages (French, English, German, Italian, Dutch) is required.

Basic salary: approx. Lit. 1,300,000 after deductions; the exact figure will depend on professional experience and family circumstances.

Those interested should send a detailed curriculum vitae, along with a photo, directly to:

**The Secretary General,**
**European University Institute**
**Badia Fiesolana**
**Via dei Roccettini, 5**
**50016 San Domenico di Fiesole (Firenze)**

Closing date for receipt of applications: *within 30 days of the appearence of this advertisement.*

### TASMANIAN COLLEGE OF ADVANCED EDUCATION

As part of the rationalisation and reorganisation of post-secondary education in Tasmania, the Launceston College of Advanced Education is relocating its major administrative functions at the Newnham Campus in Launceston, a city of 70,000 population set on the banks of the River Tamar. Housing is readily available at moderate prices as is transport to Hobart by frequent air services.

From the city there is easy access to fishing, boating, skiing, etc., and with the surrounding countryside the location offers a variety of life styles.

### DIVISION OF EDUCATION SERVICES

Within the T.C.A.E. two campuses the Division of Education Services includes a variety of activity units including the Resource Materials Centre, A.V. Production, Student Counselling and Housing, Computer Services and the External Studies unit.

### Head, Division of Education Services

Salary: $30,123.00 p.a.
The head of the division will have responsibility for the direction and management of these services over the whole college with delegation of certain responsibilities to a local head at the Mt. Nelson campus. The Head of Division should be a person with a broad understanding of those functions in an academic institution, experience in management in a tertiary institution and the ability to work with a wide range of academic staff.

### Head, Education Services, Mt. Nelson Campus

Salary: within the range of $23,543.00-$25,407.00 p.a.
This person will be responsible to the Head of Division for the operation of the divisional units on the Mt. Nelson campus. It is desirable that the person should have specialised in one of the major areas of responsibility such as Library Services or A.V. Production.
Enquiries about the above two positions should be made to Dr. Smith, acting principal, T.C.A.E., Launceston, Tasmania 7250. Tel. (003) 26 1244.
Written applications, which should include the names and addresses of three referees, close with the Personnel Officer of the T.C.A.E., P.O. Box 1214, Launceston, Tasmania, Australia, on 17th October, 1977. Tel. (003) 26 1244.

### TORRENS COLLEGE OF ADVANCED EDUCATION

Torrens College of Advanced Education is a multi-disciplinary College consisting of five schools, including a School of Teacher Education.

### PRINCIPAL LECTURER IN Technical and Further Education

Responsibilities include teaching, organising research, planning and developing new courses and generally providing academic leadership in teacher education for Further Education lectures.

The successful applicant should have demonstrated outstanding professional performance and should have high qualifications in one or more of the following, with particular reference to post-secondary education—Philosophy, Social Psychology, Education, Educational Administration History. Some work experience in Industry and commerce and/or teaching in Technical and Further Education is essential.

The position is a permanent one after an initial probationary period. For the first three years, the person appointed will be Head of the Department of Technical and Further Education which will include a staff of about eight.

Salary A$23,047.

Applications including name age, address, qualifications and experience should be sent to:

The Academic Secretary,
Torrens College of Advanced Education,
Holbrooks Road,
Underdale, South Australia 5032
to reach him by October 17, 1977.

**MOZAMBIQUE**
EDUARDO MONDLANE UNIVERSITY
MAPUTO, FACULTY OF AGRONOMY

Applications are invited for LECTURESHIPS in plant protection (pathology), agricultural entomology, agronomy (tropical crops), microbiology, (mechanisation), farm machinery, horticulture and fruit growing, plant physiology, agrometeorology (forages and irrigation). Preference will be given to applicants who have completed postgraduate studies and who have experience in university-level teaching and research. Experience in agricultural production is an asset. Contracts are for two years and successful applicants resign (leave) permanent.
Commencing date by agreement.
Further details and application forms from: Mozambique Embassy, Programme Department, 15 Lindsay Street, London WC2A 3JJ.

**FRANCE**
THE ECOLE SUPERIEURE DE COMMERCE ET D'ADMINISTRATION DES ENTREPRISES
4, rd Trudaine 63037, Clermont-Ferrand Cedex, France

Requires for January, 1978, an engineer if available, a LECTURER with the prospect of promotion to HEAD of the LANGUAGES DEPARTMENT. This is an undergraduate school of management and business studies and the department numbers 18 part or full-time staff. Candidates should have at least five years experience of TEFL professionally in a special purposes context, a postgraduate TEFL qualification, good French and if possible some management experience.
Initial two-year contract minimum, starting salary 70,000 francs per year.
Applications before October 3rd.

## Overseas continued


DARLING DOWNS INSTITUTE OF ADVANCED EDUCATION

**Toowoomba - Queensland**
**AUSTRALIA**
**SCHOOL OF ART**

**Department of Performing Arts**

The Department of Performing Arts offers a three-year (full-time) programme leading to the award of Diploma of Arts (Creative). Both the Performing and Visual Arts Departments of the Institute aim to give a basic understanding of all the major art areas. Students devote a major part of their study to general electives from the School of Arts or other Schools in the Institute. The Performing Arts course provides in-depth study in several areas of theatre skills and specialised functions in both the expressive and technical aspects. The Department allows students to concentrate upon either the Theatre Arts or Music. The Theatre Arts course includes Acting, Theatre Design, Stage Management, Technical Theatre, Directing and Childrens Theatre. The Department's central facility is the 220 seats Arts Theatre.

**Staff 1978 (THEATRE)**

Applications are invited from experienced theatre professionals or teachers in the following Performing Arts areas:

**Senior Lecturer/Lecturer: Techniques of Acting Ref. No. 90/63**

This appointment will cover all classes in Acting and Movement from first to third year and applicants should have extensive experience in the professional or semi-professional theatre in addition to the appropriate teaching qualifications. The appointee will also be required to make a substantial contribution to the public performing activities of the Department and will be encouraged to accept invitation to work in the Darling Downs region and other places as opportunities arise.

**Lecturer: Theatre Design Ref. No. 90/64**

This appointment will cover the teaching areas of stage and costume design, props making, model making and programme and poster layout for Technical students from first to third year. The appointee will also be expected to contribute to the public performing activities of the Department and will be encouraged to accept work in the Darling Downs region and other places as opportunities arise. Some experience in television design would be an advantage.

**Instructor: Stage Management Techniques Ref. No. 90/65**

The appointee will assist in the training of all stage management and technical students within the Department will finally be responsible for the technical staging of all departmental productions. The appointee will also accompany departments touring groups where necessary and will be responsible for supervising students in all areas concerned with stage management.

**Instructor: Voice and Speech in the Theatre/Radio Ref. No. 90/66**

The Department proposes to develop in the area of Media and the subsequent use of Performing Arts students in the areas of Radio and Television and Cinema. The appointee will primarily be responsible for instruction in Voice in the Theatre; however, some experience in Radio or Television would be an advantage.

**SALARIES:**

| | | |
|---|---|---|
| Senior Lecturer I | $21,123-$22,505 | per annum |
| Senior Lecturer II | $19,290-$20,665 | per annum |
| Lecturer I | $16,809-$18,884 | per annum |
| Lecturer II | $14,345-$16,420 | per annum |
| Lecturer III | $12,346-$14,162 | per annum |
| Instructor Div. I | $11,578-$12,669 | per annum |
| Instructor Div. II | $10,269-$11,312 | per annum |

Applications, including the names of two professional referees, should be submitted by 28th October, 1977 to: Official Secretary, Agent General for Queensland, 392-393 Strand, LONDON, WC2R 0LZ.

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## Announcement


**THE MUSLIM INSTITUTE for Research and Planning**

The MUSLIM INSTITUTE, which is soon to move into its new premises in London, offers five graduate studentships tenable at British universities. Successful candidates will join a research team working on *The Road to Medina* project for the development of new approaches in the study and presentation of the Seerah. Three candidates will be from Islamic/Mid-Eastern/Arabic/Persian studies; others with social/physical sciences background and some knowledge or interest in science policy, systems analysis, and future studies. Write with cv (four copies) before October 17, 1977, to:—

Dr Kalim Siddiqui
32 Warrington Avenue, Slough, Berkshire

MIDDLESEX
Lady ... [illegible]

LONDON, W.1
Private college requires urgently graduate TEACHERS ... [illegible]


## Universities continued


BIRMINGHAM
UNIVERSITY OF ASTON
DEPARTMENT OF SAFETY AND HYGIENE
[illegible]

Applicants are invited for ... [illegible]

(2) OCCUPATIONAL HYGIENE—Successful applicants would be required to lecture on parts of the Department's existing engineering safety courses ... [illegible]

(3) MANAGEMENT STUDIES—a successful applicant would be required to lecture on existing parts of the Department's courses in organisational behaviour, management, and industrial relations, and to develop teaching and research in his/her specialist field relevant to the needs of Government Health and Safety Inspectors and other health and safety specialists.

SENIOR LECTURERS
(Reference 2201 15c)
Applications are invited for not more than three newly-created senior posts. Applicants should have a doctorate or equivalent qualification, the relevant teaching and administrative experience, etc. Research interests in a field appropriate to safety and hygiene. ... [illegible]

Application forms and further particulars may be obtained from the Staff Officer (Reference No 2201 15c or 2201 15d), University of Aston in Birmingham, Gosta Green, Birmingham B4 7ET, to whom applications should be forwarded not later than October 31, 1977.

SALFORD
THE UNIVERSITY
DEPARTMENT OF MATHEMATICS
RESEARCH FELLOW
The appointment, sponsored by the Science Research Council, is for two years in the first instance, to commence on 1 November, 1977 or later ... [illegible]

Salary within the range £3,333 to £3,761 p.a. with U.S.S. superannuation.

Further particulars and application forms may be obtained from the Registrar, University of Salford, Salford M5 4WT, to whom completed applications should be returned by 10 October, 1977, quoting reference MA 152 THES.


## Colleges and Departments of Art


Duncan of Jordanstone College of Art
Dundee

Post of
**Principal**

Applications are invited by the Board of Governors from suitably qualified candidates for the post of Principal of the College.

Courses in the College comprise Degree and Honours degree courses in Architecture and in Town and Regional Planning, run in the College in association with the University of Dundee; CNAA degree and honours degree courses in Design and Diploma courses in Drawing and Painting, Sculpture, Design and Home Economics; HND courses in Institutional Management and Catering and Hotel Keeping and courses in Printing.

Further particulars and forms of application may be obtained from:

The Secretary,
Duncan of Jordanstone College of Art,
Perth Road,
Dundee DD1 4HT
(telephone Dundee 23261 Extension 4)

to whom completed applications should be returned not later than 14 October 1977.


## Research


**SHEFFIELD CITY POLYTECHNIC UNION OF STUDENTS**
**RESEARCH OFFICER**

Applications are invited for the post of Research Officer to the Students Union. The post is designed to provide student officers and representatives with research and information support, in all areas of Union participation. The post is open to a graduate, of an appropriate discipline, who can deal with the tasks objectively and has the ability to digest, analyse and present information clearly and concisely.

Salary (negotiable) A.P. 1/2. Local Government Superannuation conditions may apply.

Applications (no forms) should be sent in writing to the President of the Union of Students, Sheffield City Polytechnic, Pond Street, Sheffield, by Tuesday, 27th September, 1977. Interviews are to be held on the 5th October.

Full information concerning experience and special skills, together with the names and addresses of three referees, should be given.

SSRC
RESEARCH VISITS TO GERMANY AND FRANCE 1978
[illegible]

SALFORD
THE UNIVERSITY
DEPARTMENT OF MODERN LANGUAGES
TEMPORARY LECTURER IN RUSSIAN
For one year, commencing as soon as possible. ... [illegible]


## Polytechnics continued


**NEWCASTLE UPON TYNE POLYTECHNIC**
Division of Education Studies

**PRINCIPAL LECTURER IN EDUCATION OF THE MENTALLY HANDICAPPED**

Required from 1st January, 1978, to lead a team of specialist tutors teaching on the pre-service and in-service courses in the Education of the Mentally Handicapped and to make a major contribution to the new CNAA BEd Degree Course and established Certificate of Education as well as to Planning the re-submission of pre-service courses for 1980 which is still at an early stage. Applicants should be trained graduate teachers with relevant experience.

Department of Modern Languages
**TEMPORARY LECTURER IN SPANISH**

Applicants should preferably be native speakers with suitable qualifications of Honours degree level. They should also have a special interest in social sciences. Post tenable for two years commencing 1st January, 1978.

Department of Electrical Engineering and Physical Electronics
**TEMPORARY LECTURER**

Candidates should have a degree and experience relevant to electrical engineering, preferably digital engineering, computer technology, computer applications or microprocessors. Participation in research and advanced-course activities will be expected. Post tenable for two years from 1st November, 1977.

Burnham FE Principal Lecturer: £5,940-£6,642 (Bar to £7,578 plus £312 and £180 per annum salary supplements.
Burnham FE Lecturer II: £3,279-£5,403 plus £312 and up to £180 per annum salary supplements.

For further particulars and application forms, returnable by Wednesday, 12th October, 1977, please send stamped addressed foolscap envelope to Staffing Officer, Newcastle upon Tyne Polytechnic, Ellison Building, Ellison Place, Newcastle upon Tyne NE1 8ST.

LEICESTER
THE POLYTECHNIC
FACULTY OF ART AND DESIGN
SCHOOL OF INDUSTRIAL DESIGN
LEVEL III IN INDUSTRIAL DESIGN (Post No. ...)
Applications invited from qualified Industrial Designers with practical experience and a keen interest in design education for this post concerned with the B.A. Hons. and M.A. Degree courses in Industrial Design (Engineering) ... [illegible]

Salary: £5,744 to £6,447 bar £6,909 per annum (inclusive of supplements) commencing point according to qualifications and experience. Further details and application form available from: Staffing Officer, Leicester Polytechnic, P.O. Box 143, Leicester LE1 9BH.

LEICESTER
THE POLYTECHNIC
SCHOOL OF ECONOMICS AND ACCOUNTING
Applications are invited for (1) Post ... LECTURER II/SENIOR LECTURER in ECONOMICS for Degree and other courses.
Salary £3,744 to £6,447 bar £6,909 per annum (inclusive of supplements).
Application form and further particulars from: Staffing Officer, Leicester Polytechnic, P.O. Box 143, Leicester LE1 9BH. Closing date October ...

MANCHESTER
THE POLYTECHNIC
FACULTY OF MANAGEMENT AND BUSINESS
PRINCIPAL LECTURER IN ECONOMICS
The successful candidate will take over duties of Course Leader of the B.A. (Economics) degree course and as such will be expected to provide strong academic leadership for the course as a whole, to make a major contribution to the teaching and examining of one or more of the specialisms on the course, to ensure the maintenance of academic standards and to stimulate and to contribute to the research effort of the department.

Applicants should be well qualified in Theoretical Economics, should have relevant teaching and research experience and be able to show evidence of their abilities in the form of published work.

Salary scale: £6,040 to £6,642 (bar) to £7,578 plus £312 per annum supplement.

For application form (returnable by 7th October 1977) please send a self-addressed envelope (marked "M/109") to the Secretary, Manchester Polytechnic, All Saints Building, Manchester M15 6BH.



THE POLYTECHNIC OF NORTH LONDON
RESEARCH FELLOWSHIP IN MODERN LANGUAGES

GRADUATE in SPANISH with a qualification in Applied Linguistics and experience in language testing and teaching at all levels required as a Research Fellow to monitor intensive courses for staff of ... C.N.A.A. modern language degrees. Knowledge of German and/or French is essential.

Duties to commence January 1978 for 1 year with possible renewal.

Salary scale: £3,... (inclusive of London Allowance).

Application forms and further details may be obtained from The Secretary, Department of Languages and Literature, The Polytechnic of North London, Prince of Wales Road, Kentish Town, London, N.W.5.

Closing date for applications 14th October 1977.


## Courses


CAMBRIDGE
BROOKSIDE COLLEGE
will be holding four-week courses in October and November in the TEACHING OF ENGLISH as a FOREIGN LANGUAGE. Certificate to T.E.F.L. for successful students.
Apply to the Vice-Principal, 5 Brookside, Cambridge. Telephone: Cambridge 60706.

SURREY
THE UNIVERSITY
DEPARTMENT OF PHILOSOPHY
M.A., M.Phil. AND Ph.D. IN PHILOSOPHY
The Department offers the above degrees. ... [illegible]
The M.A. degree is taken with specialisation in one of: Philosophy of Education, Religious Studies, Philosophy of Science.
The M.Phil. and Ph.D. degrees are taken by research and thesis.
There is to be no increase in present part-time fees.
Further details available from the Department Secretary, Department of Philosophy, University of Surrey, Guildford GU2 5XH.

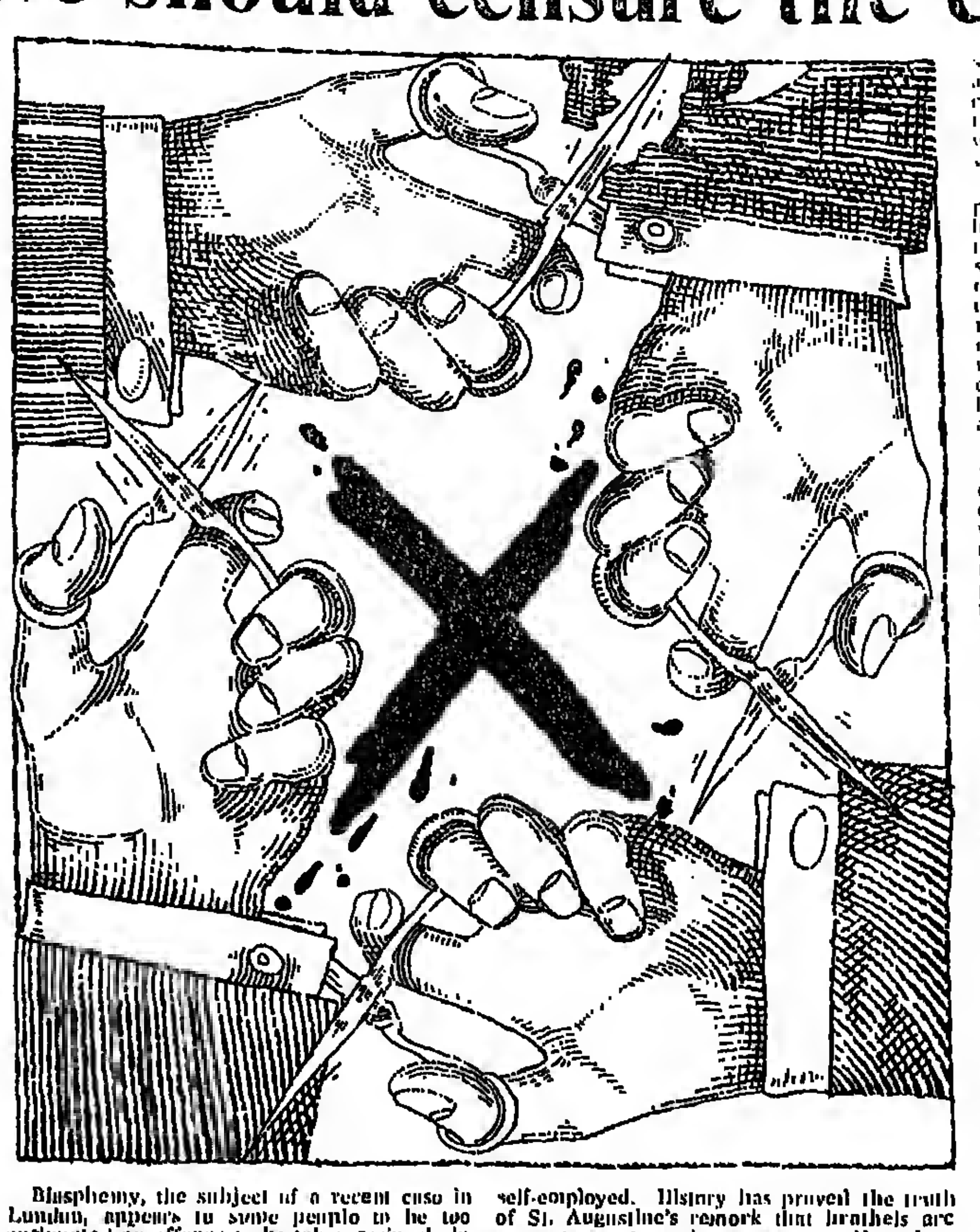

## General Vacancies


GRADUATE
Urgently required to lecture in business subjects to mature students on ... [illegible]
Write to ... Director of Studies, Centre for Business Studies, ... [illegible]






# When we should censure the censors



It is idle to imagine—as some people do—that censorship could be abolished completely. All culture depends on censorship of one kind and another; there could be no civilization without the restraints that each individual puts upon himself, and those which society puts upon its members, restraints which are far more extensive and pervasive than the formal interdictions of positive law.

There is, however, a narrower sense of the word "censorship" where talk of abolition becomes more sensible, and I shall write of this as Censorship with a capital C. Some societies set up, in addition to all their various censorial activities, specific institutions of Censorship: the press censor, the theatre censor, the book censor, the cinema censor and other such bodies to scrutinize material intended for public diffusion to make sure that it is acceptable.

Censors of this kind are well entrenched in the modern world, and are today more powerful and more energetic perhaps than they have ever been, except in wartime. They all represent, to a greater or lesser degree, a danger to freedom not because censorship as such is bad, but because so much censorship is already provided by the authority which prevails within society itself.

The worst of all censorships is undoubtedly political Censorship, the suppression of information and ideas for political reasons, something practised not only by totalitarian regimes but by some of the most avowedly progressive despotisms. One alarming feature of such censorship is that it extends from the strictly political domain to forbid the expressions of any thoughts—religious, moral, philosophical, aesthetic—which might seem to have political implications.

As the communications have become more efficient, and as literacy has become more universal, such political Censorship has grown more active. And yet there is nothing new about it: it is as old as government itself. Nor is there anything novel about the arguments that are put forward in defence of it. It is justified on the grounds that the people must be protected from heresies and falsehood.

In the modern world, ideology has largely taken the place of religion; but ideology has not inherited the mantle of tolerance that Christianity wore in the nineteenth century; it has revived instead the spirit of fanaticism which possessed Christianity in the sixteenth and seventeenth centuries; we have gone back to an age of intolerance. Our ideologies are confident both that they possess a monopoly of truth, and that it is their duty to thwart the diffusion of error. With such an assurance of rightness, one cannot easily argue.

But at least we can refute some of the more shallow defences of Censorship. It is sometimes said, for example, that because censorship of one kind or another is ubiquitous there is nothing to choose between our system of censorship and another. "In the USSR they censor Solzhenitsyn, in the United States they censor Chomsky" (*Le Nouvel Observateur*, March 29, 1975).

What truth is there in this? The story behind this particular charge is that an American publishing house, which had commissioned a book from Chomsky, was bought up by another publisher, who rejected the manuscript (which soon found another home); so the episode has really nothing at all in common with the Soviet method, which forestalls the publication of any writer of whom the regime disapproves. In this sense of systematic Censorship, America has none.

## Necessary restrictions

Yet it is of course true that America has laws which set limits to the freedom of expression, and that Great Britain has laws which set even stricter limits. It is a well-reasoned belief of all liberal societies that limitations must be placed on certain sorts of publications, notably sedition, blasphemy, obscenity, libel, and, we must nowadays add, invasions of privacy.

"Sedition" may be stretched, and as often as not is stretched, to mean anything that a government feels injurious to its interests; but the word has a hard centre of meaning which concerns the preservation of national security, something which may well depend on certain information being kept secret. Free countries are not naturally good at keeping secrets. The Americans have a secret service, but its activities are repeatedly being disclosed; the British are all too easily betrayed by people like Kim Philby; and yet intelligence cannot function without secrecy, and since intelligence often prevents war, we can hardly wish that it should cease altogether.

Hence, Censorship for security reasons, "the classification of sensitive data", or whatever the polite expression is, can be justified. A necessary precaution in this area is that the executive government should be made answerable to an independent judiciary in all controversial decisions. When, as in the Aspin-Hosenball case, the judiciary approves of the executive's decision, the public must, I think, be satisfied. It is irrational to expect an "open verdict openly arrived at" in a field of activity where secrecy is a defining characteristic.

Blasphemy, the subject of a recent case in London, appears to some people to be too antiquated an offence to be taken seriously in 1977, but we should perhaps reflect that only a society with no values at all—only a society with no sense of the sacred—could fail to be sensitive to blasphemy; an unshockable society would be unbearably barbarous.

The real protest that one must make about the Gay News case is not that James Kirkup's poem was found blasphemous by the jury, but that the penalty imposed by the judge was out of all proportion to the crime: a moderate fine would surely have been the appropriate punishment for what was at worse a lapse of taste.

Obscenity is an even more explosive subject, especially in Great Britain, where, for some reason, it generates more passion than it does elsewhere. In this field, as in others, violent emotions yield injustice. For example, a few months ago a man who showed blue films behind closed doors at a private club in Islington was sent to prison for three years, while no action seems to be taken against the pornographic magazine trade, which circulates its vulgar materials in almost every newspaper shop and news stand in the kingdom.

One difficulty is that the law courts have vitiated any sensible policy by stipulating definitions of "obscenity" which are far removed from ordinary usage. "Corruption", which the Bench goes on and on about, is nothing to do with the problem. What the British public is concerned about in its calmer moments, and is fully entitled to be concerned about, is the preservation of decency and the curtailment of indecency. We may hope that the Royal Commission recently set up under Professor Bernard Williams—and therefore having a philosopher and not a lawyer for its chairman—will come out with some proposals which answer this demand.

It ought not to be difficult to devise legislation on the lines of that in force in France and Western Germany. Erotic literature might, for example, be taxed like gin, and sold only in licensed shops, which would be forbidden any garish form of advertising; blue films could be shown only in a limited number of special cinemas, with their publicity similarly curbed.

It would be important to avoid the follies of the Wolfenden Report legislation, which swept prostitutes "under the carpet" in England, without any space under the carpet being provided for them; for that only increased the activity of the criminal underworld, with gangsterdom and police corruption involved with prostitution. What is needed is the discreet control of both prostitution and pornography, so that neither decency nor public order is disturbed.

There is everything to be said for a *maison close*, or an "eros centre" where the girls are licensed, medically-examined and strictly self-employed. History has proved the truth of St. Augustine's remark that brothels are as necessary in a city as sewers. Nowadays pictorial pornography serves as a kind of *bordel imaginaire*, deserving the same toleration as the real thing, but needing no less control in the interests of propriety.

We must never count on the triumph of virtue. Nor ought we to expect too many supplementary benefits from freedom. When the theatre censor was abolished in England a few years ago, many people imagined that a succession of suppressed dramatic masterpieces might at last be mounted on the London stage. But what have we seen? *Oh Calcutta, Pyjama Tops, Let My People Come.*

One is tempted to think that things were better in the days of the Lord Chamberlain, for then one could at least see in theatre clubs such plays as *Huis Clos, Le Balcon,* and *The Children's Hour*. But if the English stage has so far made poor use of its liberty, it is still a great thing to have that liberty, to have rid ourselves of one anachronistic and unnecessary censor.

It is less easy to speak about the abolition of cinema and television censorship, for here there is no single censor, but several censorial institutions. Again one is troubled by the extraordinary potency of the image, as opposed to the word, in shaping people's conduct, a potency which, coupled with the numerical magnitude of the audience, confers a terrifying power on the men who project the images. Surely the people who control the screen must themselves be controlled? And this is not a question of Censorship in the simple sense of cutting things out, but of control in the positive sense of deciding what goes in.

But if there is a case to be made, in theory, for the censorship of the screen, it is difficult to defend the kind of censorship which is actually exercised by our British cinema censors (whether in the industry's own Board, or in the municipal councils). For these censors accept films which glamorize crime—films such as *A Clockwork Orange*, *Straw Dogs* and various Japanese bloody epics—but they sternly exclude such hard-core entertainment as *Deep Throat*, *Barbara Broadcast* and *Long Jeanne Silver*.

I would not, as I have said, wish hard-core films to be shown on general release; I want no old lady to be shocked. But I would consider it far more the duty of a censor to curtail films which incite impressionable persons to crimes of violence than films which might raise the temperature of sexual desire (although perhaps the real purpose of hard-core films is not so much to stimulate as to satisfy in fantasy wishes which cannot well be satisfied in actuality, such as, in the case of *Long Jeanne Silver*, the desire for sexual congress with an amputee).

There is a crime of spoken utterances, that of public speech liable to lead to a breach of the peace. Commonsense might think that similar grounds would justify limiting the activities of film producers. But British film censors seem to think of themselves as essentially and exclusively fig-leaf committees, with no duty beyond but that of keeping the screen "clean".

I mentioned earlier two other kinds of publication which most of us would wish to have silenced: that which is libellous and that which constitutes an unwarranted intrusion into privacy. This demand arises from our understanding of the rights of the individual, which include a right to the protection of one's good name, and to the enjoyment of a private life. These rights are not usually considered within the province of censorship, since the protection of such rights is usually left to the individual's own efforts and to the operation of the law of tort.

But I would argue that the protection of such rights can no longer be left to the individual and the civil courts, because the civil law in most Western states no longer works as an effective remedy against libel and the invasion of privacy. The intervention of the public authority is needed to impose that would be in effect criminal penalties on publications which injure individuals in these ways. Civil litigation has simply become too expensive to be of use to the average man for the protection of his rights.

## Trade union action

I have suggested that political Censorship is the most sinister of all dangers to the freedom of expression. Today political Censorship is not confined to that which emanates from the State. In Great Britain and in France—and even in Denmark—we see emerging a new form of political Censorship which emanates from the trades unions.

The unionization of the workforce has been, in any case, a mixed blessing for the press everywhere. It is undeniable, for instance, that the excessive wage demands of the unionized manual workers of the American newspaper industry made it increasingly uneconomic for any publisher to stay in business: so the unions literally killed dozens of newspapers in New York and other cities. The workers were not content to bite the hand that fed them; they cut off the branch on which they all sat. By demanding—and receiving—the lion's share of the proceeds of the industry, the manual workers have left little over to be shared among the journalists.

If the British National Union of Journalists is so cavalier about metaphysical principles of liberty, it is perhaps because journalists have for so long been the cinderellas of the newspaper industry, more often than not underpaid. A closed shop of journalists might, or might not, increase their short-term material conditions; but it would certainly destroy the one solid basis of press freedom, which is the right of the editor to print what he chooses, and to commission whomever he wishes to write for his pages.

This does not mean that an editor as an individual must be sovereign. For I shall surely be reminded that in the Western world no editor has total liberty, because every editor is answerable to his proprietor, and some proprietors are more interfering than others. Mr Michael Foot, when he was editor of the Evening Standard was doubtless subject to continuous directives from Lord Beaverbrook; or this may explain Mr Foot's present lack of enthusiasm for the freedom of the press as it exists in capitalist society.

However, in the eyes of the ordinary reader, Lord Beaverbrook was always the supreme editor of his papers; his working editors were simply his executives. It is usual for editors to enjoy more independence than Beaverbrook allowed his; and journalists are naturally excited about the division of authority between editor and publisher. There has, for example, been some agitation in Paris recently since M Hersant, the owner of *Le Figaro*, started to say what should be printed in his own paper—leading his editor and leading editorialists to resign, invoking the "freedom of the press".

But such disputes between publishers and editors have a limited significance for the freedom of the press in general, where the important point is that the editorial board (including publisher and editor) should be subject to no outside pressures or interference, such as may come from the State or the unions.

It is also very important to the freedom of the press that there should be a variety of papers. It is lamentable that there should no longer be in London as there was until a few years ago a daily trade union paper, the *Daily Herald*, and a Sunday cooperative movement paper, *Reynold's News*. The British trade union movement did one great disservice to the freedom of the press by letting these papers die; and it will do a double injury if it persists in its short-sighted policy of imposing a journalists' closed shop on the papers which survive.

**Maurice Cranston**

*The author is professor of political science at the London School of Economics.*

# NOTICE BOARD

## Chairs

Mr Mervin King, lecturer in the faculty of economics, Cambridge and director of studies at St John's College, has been appointed to the Esmée Fairbairn chair of investment at the University of Birmingham.

Dr R. M. M. Crawford, Reader in Botany, University of St Andrews, and fellow of the Royal Society of Edinburgh has been promoted to a personal chair.

Dr D. E. R. Watt, senior lecturer in medieval history in St Andrews has been promoted to a personal chair.

Professor P. K. Pattanaik has been appointed to the chair of mathematical economics in the University of Birmingham, from next June. Since 1975 he has been professor in the economics department of La Trobe University, Australia.

Professor B. H. Hundy has been appointed professor and head of the Cranfield Institute of Technology's school of production studies. Professor Hundy joined to the institute in 1972 as professor of automobile manufacture.

Professor V. Alan McClelland has been appointed to the chair of educational studies in the University of Hull. He has been professor of education in the National University of Ireland and head of the department of education at University College, Cork, since 1969.

Mr Michael Chesterman, currently senior lecturer in law at the University of Warwick, has been appointed to the chair of law in the University of New South Wales. He will take up his post in January.

## Forthcoming events

Residential Conference "Ruskin as critic", organized by the Victorian Studies Centre and the department of adult education in conjunction with the Victorian Society will be held at College Hall, University of Leicester, Knighton Road, Leicester LE2 3TR, from September 23-25. Speakers include: Professor Quentin Bell, University of Sussex, Mr J. Dearden, curator, The Ruskin Galleries, Bembridge School, and Professor Luke ... University of Leicester. Further information from Brian Threlfall, department of adult education, University of Leicester, Vaughan College, St Nicholas Circle, Leicester ..., telephone Leicester 57368.

The Society of Electronic and Radio Technicians is arranging a residential symposium on "... Learning Systems" at the ... Engineering Training Centre, ... from September 23-26. ... the symposium ... S.E.R.T., 8-10 Charing Cross ..., London WC2H 0HP.

* * *

The City University ... adult education courses in ... sciences, politics and economics, ... theatre and dance, arts and crafts, history and archeology, science ... ology, mathematics and ..., philosophy and religion, literature, special interests. Further ... from Adult Education Centre ... and Related Studies, The City University, St. John Street, London EC1V 4PB, telephone 01-253 4399.

## Appointments

### Universities

**Nottingham**

Special professors: S. S. Adams (pharmacology); R. E. Beard (industrial economics); J. K. A. Bleasdale (horticulture); T. Lewis (applied entomology in the department of physiology and environmental studies). Special lecturers: J. E. G. Barnett (biochemistry); A. B. Wilson (applied biochemistry).

### General

**The Institution of Electrical Engineers**
For the year 1977-78: Mr John Ferguson, consultant, has been elected as president of the institution. Professor Frank Benson, head of electronic and Sheffield, has been elected chairman management division. Mr Frank Boardman, systems technical manager, Central Electricity Generating Board, planning department, has been elected chairman of the control and automation division. Mr Charles May, director of research, the Post Office, has been elected chairman of the electronic division. Mr Donald J. Miller director of engineering, South of Scotland Electricity Board, has been elected chairman of the power division.

## Grants

**Leicester**
Mass Communications.—£69,000 from the World Association for Christian Communication for a study of mass media and social/cultural change in the Third World, under the direction of Professor J. D. Halloran.

**London**
Sociology of Education.—£24,322 from the SSRC for research at the Institute of Education on pupils identities and teacher strategies within mixed ability curricula, under Mr W. B. Davies.

**Open**
Earth sciences.—£69,000 from the Ministry of Overseas Development to carry out research into mineral deposits in the Oman Mountains and examine the geophysical features of the area, in collaboration with the Overseas Division of the Institute of Geological Sciences.

**Southampton**
Mathematics.—£25,597 from the SSRC for analysis of data from complex surveys, under Professor T. M. F. Smith and Dr D. Holt.

**York**
Psychology.—£23,687 from the MRC for a study of recent memory in pigeons: a behavioural and physiological analysis using hyperstriatal and paleostriatal lesions.

**Noticeboard is compiled by Patricia Santinelli and Mila Goldie**

## Open University programmes September 24 to September 30

### Saturday September 24

BBC 2
- 7.40 Man-made futures: design and technology: "The Future of Alternative Technology" (T262; prog 11).
- 8.05 Making sense of society: Where is Wales? (D101; prog 31).
- 8.30 Technology foundation course: Work Study at Hoover Ltd (T100; prog 28).
- 8.55* Systems modelling: "Is There Safety in Numbers?" World Modelling on Trial" (T341; prog 8).
- 9.20 Topics in pure mathematics: "Finite Theory" (M202; prog 8).
- 9.45* Introduction to engineering mechanics: Evolution of Design: The Jet Engine (T231; prog 11).
- 10.10 An algorithmic approach to computing: Interrupts and Multiprogramming (M251; prog 10).
- 10.35 Renaissance and Reformation: "The Changeling" (A201; prog 30).
- 11.00 The nature of chemistry Part 2: Conformation in Proteins" (S304; prog 31).
- 11.25 Images and Information: Seeing With Sound (ST291; prog 15).
- 11.50 Biochemistry: Microbiology (S2-1; prog 6).
- 12.15 Industrial relations: For the Good of the Company (P881; prog 9).
- 12.40 Problems of philosophy: "Time" (A303; prog 10).
- 13.05* International politics and foreign policy: Super Powers and the Arab/Israeli Dispute (D332; prog 6).

RADIO 3 (VHF)
- 6.35 Economics and education policy: Education in Poland (ED322; prog 8).
- 6.45 Mathematics foundation course: Differential Equations (3) (M100; prog 31).
- 7.10 Arts foundation course: Industrialization and Culture (A100; prog 31).
- 7.35 Science foundation course: The Building of the A-Bomb (S100; prog 31).

RADIO 4 (VHF)
- 9.05 Open Forum—33.
- 9.20 History of architecture and design 1890-1939: The Reform of the Skyscraper (A305; prog 29).
- 9.40 The age of revolutions: The Wesley Hymns in their Historical Setting (A202; prog 31).
- 10.00* Personality and learning: Hinsdale Park School (E201; prog 29).
- 10.20* Twentieth-century poetry: Ted Hughes: "Crow" (A306; prog 10).
- 10.40* Modern art from 1848 to the present: styles and social implications: The Impact of Abstract Expressionism (A351; prog 15).
- 11.00* Decision making in Britain: The Office of the Prime Minister: Part 1 (D203; prog 30).
- 11.20* Science and belief: from Copernicus to Darwin: Physical Science and Philosophy of Nature in the romantic period (AMST283; prog 10).
- 11.40* Social psychology: Assault on Identity (1) (D305; prog 14).
- 14.00 Renaissance and Reformation: Satire in Shakespeare's Time (A201; prog 31).
- 14.20* Management in education: The Educators Part 3: "Countdown" (E321; prog 10).
- 14.40* The sociological perspective: The End of Ideology (D283; prog 15).
- 15.00* War and society: Non-Violence as Political Action (A301; prog 14).
- 15.20* Curriculum design and development: The Disabling Professions (E203; prog 22).
- 15.40* Urban development: Chicago and Glasgow: but Converging? (DT201; prog 29).
- 16.00* The handicapped person in the community: Disability and Income (P853; prog 10).
- 16.20* Patterns of inequality: Reform from the Grass Roots (D302; prog 31).
- 16.40 Language and learning: Good Food Talk (E262; prog 15).

RADIO 3 (VHF)
(replacement programmes for North Scotland and Wales)
- 24.00* Twentieth-century poetry: Ted Hughes: "Crow" (A306; prog 10).
- 00.20* Modern art from 1848 to the present: styles and social implications: The Impact of Abstract Expressionism (A351; prog 15).
- 00.40* Science and belief: from Copernicus to Darwin: Physical Science and Philosophy of Nature in the romantic period (AMST283; prog 10).

### Sunday September 25

BBC 2
- 7.40 Arts foundation course: Victorian Cast Iron (A100; prog 3A).
- 8.05 Science foundation course: "The Nucleus" (S100; prog 31).
- 8.30* Mathematics foundation course: Groups 2 (M100; prog 30).
- 8.55* Electromagnetics and electronics: Servo-Mechanism (T282; prog 16).
- 9.20 Biological bases of behaviour: Neural Modelling (SDT286; prog 10).
- 9.45 Geophysics: Earthquakes (S2-4; prog 8).
- 10.10* The Age of Revolutions: Daumier and his Robert Macaire (A202; prog 10).
- 10.35* Personality and learning: "Diagnosis of Learning Problems" (E201; prog 18).
- 11.00 Mass communication and society: Shooting Scene 330 (DE353; prog 12).
- 11.25 Economics and education policy: Unemployment After Education (ED322; prog 8).
- 11.50 The Earth's physical resources: Ideas for the future (S266; prog 7).
- 12.15* Fundamentals of human geography: Redlining the City (D204; prog 10).
- 12.40* Curriculum design and development: A Fish in a Tank (E203; prog 14).
- 13.05* An introduction to psychology: Computers and Thinking (D8201; prog 10).
- 13.30* History of mathematics: "Shaking the Foundations" (AM289; prog 10).

RADIO 3 (VHF)
- 6.00 English urban history 1500-1780: British Urban Perspectives (A322; prog 8).
- 6.20 Decision making in British education systems: Partners? (E221; prog 10).

### Monday September 26

BBC 1
- 6.40 Solids, liquids and gases: Phase Changes (S1.85; prog 15).
- 7.05 National income and economic policy: Incomes Policy (D282; prog 8).
- 7.30 Social psychology: Change in a Therapeutic Community (D305; prog 16).

BBC 2
- 6.40* An algorithmic approach to computing: Interrupts and Multiprogramming (M251; prog 10).
- 7.05* Ecology: Grasses and Agriculture (S323; prog 16).
- 7.30 Art and environment: Whatever Will Be (TAD292; prog 13).
- 16.05* Biochemistry: Microbiology (S2-1; prog 6).
- 17.20 Partial differential equations: Division (M321; prog 4).
- 17.45 Genetics: "Molecular Evolution" (S299; prog 14).
- 18.10 Mathematics foundation course: "Prediction Oscillations" (M100; prog 31).
- 18.35* Technology foundation course: Work Study at Hoover Ltd (T100; prog 28).

RADIO 3 (VHF)
- 6.00 Personality and learning: Flanders Analysis (E201; prog 30).
- 6.20 The nineteenth century: "The novel is like a Railway Station" (A302; prog 10).
- 6.40 The development of instruments and their music: Music and Society Today (A304; prog 16).
- 17.40* Language and learning: Good Food Talk (E262; prog 15).
- 18.05* Open Forum—33.
- 18.20 O.U. Announcements/Music Fill.
- 18.25* Economics and education policy: Education in Poland (ED322; prog 8).
- 18.45 Public administration: The Future of Public Administration in the USA (D331; prog 15).
- 19.10* Making sense of society: Approaching the Exam (D101; prog 31).

(replacement programmes for North Scotland and Wales)
- 24.00* Decision making in Britain: The Office of the Prime Minister: Part 1 (D203; prog 30).
- 00.20* Management in education: The Educators Part 3: "Countdown" (E321; prog 10).
- 00.40* War and Society: Non-Violence as Political Action (A301; prog 14).

### Tuesday September 27

BBC 1
- 6.40 An introduction to materials: Concords (T8201; prog 10).
- 7.05* Geophysics: Earthquakes (S2-4; prog 8).

BBC 2
- 6.40* Biological bases of behaviour: Neural Modelling (SDT286; prog 16).
- 7.05 Urban education: We Parents Know Better (E361; prog 10).
- 7.30 Language and learning: Children's Value Judgements (E262; prog 8).
- 11.25* Industrial relations: For the Good of the Company (P881; prog 9).
- 16.55* Man-made futures: design and technology: "The Future of Alternative Technology" (T262; prog 11).
- 17.20 Physiology of cells and organisms: Cirrodia: Rhythms (S321; prog 16).
- 17.45* Art and environment: Whatever Will Be (TAD292; prog 13).
- 18.10* Systems performance: human factors and systems failures: Earthquake Prediction and Prevention (TD342; prog 11).
- 18.35* Science foundation course: The Nucleus (S100; prog 31).

RADIO 3 (VHF)
- 6.20 Futurology (DS261; prog 16).
- History of mathematics: A Review of the Calculus: Option (AM289; prog 11).
- 6.40 Patterns of inequality: Revolution by Consensus—The Italian Way (D302; prog 31).

### Wednesday September 28

BBC 1
- 6.40 Systems behaviour: Shipbuilding 1 (T241; prog 14).
- 7.05 Technology for teachers: Education (Technological) (PE-T271; prog 11).
- 7.30 Telecommunication systems: Land-mobile Telephones (T321; prog 10).

BBC 2
- 6.40* Genetics: "Molecular Evolution" (S299; prog 14).
- 7.05* The Earth's physical resources: Ideas for the future (S266; prog 7).
- 7.30 Analysis: Convergence of Functions (M231; prog 11).
- 10.55 Mechanics and applied calculus: Orbits and Rutherford's Model (MST282; prog 16).
- 17.20 Twentieth-century poetry: Poetry in Public (A306; prog 11).
- 17.45* Systems modelling: "Is there Safety in Numbers?" World Modelling on Trial (T341; prog 8).
- 18.10* Modern art from 1848 to the present: Styles and Social Implications: Art as Performance (A351; prog 16).
- 18.35* Arts foundation course: Victorian Cast Iron (A100; prog 3A).

RADIO 3 (VHF)
- 6.40 People and work: Work and Society (DE351; prog 15).
- 17.40 Environmental control and public health: Costs and Control (PT272; prog 15).
- 18.05 Decision making in Britain: The Office of the Prime Minister: Part 1 (D203; prog 30).
- 18.25* Telecommunication systems: Voice Switching and Intelligibility (T321; prog 8).
- 18.40* Biochemistry and molecular biology: Antibody Function (S322; prog 13).
- 18.05* Mathematics foundation course: Differential Equations (2) (M100; prog 31).

Replacement programmes for North Scotland and Wales
- 24.00* The handicapped person in the community: Disability and Income (P853; prog 10).
- 00.20* Patterns of inequality: Revolution by Consensus—The Italian Way (D302; prog 31).
- 00.40* Language and learning: Good Food Talk (E262; prog 15).

### Thursday September 29

BBC 1
- 6.40 People and work: White Collar Workers (DE351; prog 7).
- 7.05* Mass communication and society: Shooting Scene 330 (DE353; prog 12).
- 7.30* Economics and education policy: Unemployment After Education (ED322; prog 8).

BBC 2
- 6.40 Decision making in British education systems: Pebbles and Diamonds (E221; prog 8).
- 7.05 Biochemistry and molecular biology: Antibody Diversity Immunoregulation (S322; prog 10).
- 7.30 Comparative government and politics: Why Comparative Politics? (D231; prog 8).
- 4.05 Decision making in Britain: The Crossman Legacy (D203; prog 10).
- 17.20* Systems behaviour: Shipbuilding 1 (T241; prog 14).
- 17.45 The development of instruments and their music: The Composer and his Audience (A304; prog 15).
- 18.10* Language and learning: Children's Value Judgements (E262; prog 8).
- 18.35* Making sense of society: Where is Wales? (D101; prog 31).

RADIO 3 (VHF)
- 6.00 Curriculum design and development: No Hope Without Future (E203; prog 23).
- 6.20 Urban development: Urban and Suburban Values (DT201; prog 30).
- 6.40 Industrial relations: Management Perspectives (P881; prog 10).
- 17.40* Decision making in British education systems: Partners? (E221; prog 10).

### Friday September 30

BBC 1
- 6.40 War and society: The Aftermath and World War 2 (A301; prog 15).
- 7.05* Renaissance and Reformation: "The Changeling" (A201; prog 30).
- 7.30* Systems performance: human factors and systems failure: Flixborough Disaster (TD342; prog 10).

BBC 2
- 6.40 Decision development: Social Development (DT201; prog 8).
- 7.05 Patterns of inequality: The Rural Middle Millions (D302; prog 10).
- 7.30* Twentieth-century poetry: Poetry in Public (A306; prog 11).
- 10.55 Science and the rise of industrial ... History of ... Power (AST281; prog 10).
- 17.20* Solids, liquids and gases: Phase Changes (S1.85; prog 15).
- 17.45* National income and economic policy: Incomes Policy (D282; prog 8).
- 18.10 Social psychology: Change in a Therapeutic Community (D305; prog 16).
- 18.35* Analysis: Convergence of Functions (M231; prog 11).
- 18.55 Mechanics and applied mathematics: Integration of the Orbit (MST282; prog 15).
- 19.20 Genetics: Genetic Counselling (S299; prog 14).
- 19.45 Partial differential equations and applied mathematics: ... (M321; prog 8).
- 20.10* Technology foundation course: Production Systems (T100; prog 28).

Replacement programmes for North Scotland and Wales
- 24.00 Social Sciences: The Case of the ...
- 00.20 Personality and learning: Re-Analysis (E201; prog 30).
- 00.40* Open Forum—33.

RADIO 3 (VHF)
- 6.00 Environmental control and public health: Costs and Control (PT272; prog 15).
- 6.20 Analysis: Survey of Analysis (M231; prog 11).
- 6.40 Fundamentals of statistical inference: The Linear Model (M341; prog ...).
- 17.45* English urban history 1500-1780: British Urban Perspectives (A322; prog 8).
- 18.05 Linear mathematics: Fitting Data with Numerical Methods (M201; prog 15).
- 18.25 The Earth's physical resources and Resources—Past ... (S266; prog 9).
- 18.40 Biological bases of behaviour: Neural Pathways (SDT286; prog ...).
- 10.05* Science foundation course: The Building of the A-Bomb (S100; prog 31).

Replacement programmes for North Scotland and Wales
- 24.00 Renaissance and Reformation: Jonson and His Language (A201; prog 32).
- 00.20 History of architecture and design 1890-1939: The Work of ... (A305; prog 30).
- 00.40 The age of revolutions: ... Virtue (A202; prog 33).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# BOOKS

## The taxman cometh

The State of Taxation
by A. R. Prest, C. Clark, W. Elkan et al.
Institute of Economic Affairs, £2.00
ISBN 0 255 36093 2
To Him Who Hath: A Study of Poverty and Taxation
by F. Field, M. Meacher and C. Pond
Penguin £1.00.
ISBN 0 14 0219 76 5
Self-Assessment for Income Tax
by N. A. Barr, S. R. James and A. R. Prest
Heinemann Educational, £7.50
ISBN 0 435 84060 6

Taxes interest everyone when they become aware that they are paying them, yet empirical academic work on the subject is very limited, and public myths are widespread. These are three very different books: the first two are essentially extended political arguments about the levels and burdens of taxation, the last is a detailed *academic* study of a *particular method* of administration.

*The Institute of Economic Affairs publication* is a collection of short papers produced for a day conference early this year whose main theme was that the levels of taxation and public spending in Britain are intolerably high; various speakers then considered what might be done to redress this situation. There is a succinct overview by Professor Prest, who shows that the proposition is debatable to say the least. It is our dependence upon income tax compared with social security and other taxes which is unusual and the high starting rates at which it is levied.

The later papers largely ignore the caveats and return frequently to what is to them the main puzzle. How has it come about that in a democracy politicians are prepared to and can impose levels of tax which almost everyone agrees are preposterous, penal and self-destructive? Their answer seems to be that the political system gives undue weight *to bureaucrats*, committees and interest groups. It is not working "properly". It is this readiness to blame the system when it does not produce the outcomes they favour which I found the most disturbing theme in this collection. It is not unlike the conclusion drawn by those on the far left.

A paper by Bracewell-Milnes concludes that one of the few remaining effective strategies is tax avoidance. Both tax avoidance and evasion may benefit society by forcing governments to reduce public expenditure. Altogether this is a rather thin and opinionated set of contributions, each too short to sustain a really informative contribution.

In contrast the Pelican by Field, Meacher and Pond (at half the price) is a sustained and well-documented case for reducing the tax burden on families. The general reader will benefit from reading it whether he agrees with the conclusions or not. The authors show that the burden of direct taxation on the average and below-average family with children has increased substantially during the past decade or more.

In 1950 a two-child family paid no tax unless they were earning twice the average wage and they paid at a reduced 10 per cent rate. Now the same family would pay tax if it were earning half average earnings and the rate of tax would be 35 per cent. This was a result of two factors. The erosion in the real value of the personal and child tax allowances with inflation and the elimination of the reduced rates of tax on lower earnings. The higher earners have been protected from this process to a much greater extent.

The long-term trend has not simply been the result of higher levels of public spending as the IEA pamphlet suggests but is in large part the result of a shift in the structure of taxes as a whole. Corporation taxes have contributed less and less to total tax revenue. Direct taxes too have contributed less in recent years though Field et al are less than clear on this point because they are concerned to attack the regressive effect of taxes on low pay and to throw doubt on the argument that they can be justified on any grounds.

The authors also show that social security taxes ("contributions") have become much more important than they were 20 years ago and that even after the introduction of graduated contributions their total effect is regressive because of the upper limit that is imposed on them. Part of the increased direct tax burden on the poor is therefore the result of a shift from less visible to more visible forms of tax. That, paradoxically, may have been a good thing because it has brought into the open the evident absurdity of taxing those below the supplementary benefit level, of government giving to poor families with the one hand and setting an income related tax structure to tax them with the other.

Overall the tax structure is not progressive. Tax policy is working counter to social policy. These authors do not seriously consider why this should be, whether the structure of government and the nature of advice and information given to Cabinet and its timing may not be at fault. More fundamentally they do not consider how far one might not expect burdens to fall in this way given the existing structure of society and the existence of self-interested electorates. Perhaps that is to ask them to go beyond their immediate task. Nevertheless, their concrete recommendations are thin. They assert that the poor should not pay tax at all and that the proportion of income paid in tax should rise as income rises. This would entail the removal of various expenditure reliefs which largely help the better-off. It would mean replacing the present relatively high standard rate of tax which applies over a range of incomes.

Other countries have graduated income taxes which begin at a low figure (14 per cent in the United States) and gradually build up. In principle this is a perfectly workable proposal, but it does produce considerable administrative problems given the way we administer taxes in Britain today.

This is the subject of detailed study by Barr, James and Prest. The cost of administering our income tax system is high compared to other countries. It is twice as costly as it is in the United States, for example, per pound collected. This is partly because of the sheer complexity of four various allowances and reliefs but it is to a large extent a consequence of our system of assessing tax. In Britain the Inland Revenue assess how much you should be taxed, on the basis of information you provide. It is they who calculate your tax code for PAYE and the employer deducts accordingly. The system is cumulative so that in theory the tax payer should have paid no more tax than his income warrants at any point in time—a complex and expensive process.

In many other countries the assessment of how much tax should be deducted by the employer is made by the tax payer himself. At the end of the year he must send in a tax form stating his earnings and how much tax he has paid and he must work out what he owes or is owed from the tax authorities for the year. He then either pays up or awaits a cheque from the Revenue. This process saves a great deal in administrative expenses for the state but it increases the private costs for individuals.

Barr and colleagues consider the American, Canadian and Swedish systems in detail though most attention is given to the United States and they balance the advantages and disadvantages of the two systems. On balance they favour changing the British practice to self-assessment mainly because of its economy and simplicity both for the tax authorities and employers. An odd consequence seems to be that people also prefer to claim fewer exemptions than they are entitled to and prefer to pay more in tax through the year so that they can receive a cheque from the tax authorities at the end of the year—a kind of forced savings scheme. This kind of reform would also make other changes like local income tax and tax credits more feasible.

This book is clearly and persuasively written with instructive comparative material. It is indeed an admiral example of the comparative method used for a practical purpose, and deserves to be widely read by those who are interested in tax reform.

**Howard Glennerster**

## Synoptic

The Economics of Planning
by R. Kerry Turner and Clive Collis
Macmillan, £1.95
ISBN 0 333 19657 0
The Economics of Socialism, third edition
by J. Wilczynski
Allen and Unwin, £3.95
ISBN 0 04 335034 8

Each of these fairly short books has an ambitious title, and neither can pretend to offer a comprehensive treatment of its subject.

The Economics of Planning is one of the last of Macmillan's series Studies in Economics which, according to its editors, seeks to provide "short, reasonably critical overviews of developments in selected areas of economics". It begins with a taxonomy of planning systems, and then devotes two chapters each to the theory and practice of socialist planning and practice of indicative planning. There are no conclusions.

The literature on economic planning is diffuse and varied, and an attempt to summarize it in less than a hundred pages must, if it is to succeed, have a clear focus. Instead the reader is here treated to brief synopses of numerous books and articles, and the topics covered range from Marxian economic theory and Soviet economic organization to the role of insurance in the theory of indicative planning and differences between the successive five-year plans in France. As a result the book is overloaded, with little sign of an organizing principle. This could have been provided by the opening taxonomy of planning systems, which divides them into two classes "empirical" (i e, observed in practice) and "postulational" (i e, proposals). However, the principles of classification are rather cryptically expressed and the whole classification scheme presupposes a knowledge of much of the material covered in subsequent chapters.

The section on socialist economic planning is unsatisfactory. The chapter on theory describes models aimed at solving problems encountered in practice, though the nature of these problems does not become clear until the following chapter. The authors' excursions into historical background are usually too brief to be enlightening. They fail to distinguish industrial and production associations in the Soviet Union, and the passage on page 34 on the use of a computer network for planning is seriously misleading, based upon outdated western sources. Indeed there are no references to works other than in English and the authors appear to rely entirely upon the sources listed in the bibliography. Yet almost all experience of planning is in non-English speaking countries; as the final chapter shows, Britain's unsuccessful attempts at planning in the sixties drew heavily on the French model.

Although the second half of the book, on indicative planning, is better than the first half, the *Economics of Planning* cannot be recommended either as an introduction to the subject or as a survey for students already having some acquaintance with the field. There is scope for surveys of more limited topics within the field of economic planning (of the interesting new theoretical literature on alternative resource allocation procedures, for instance), but the *Economics of Planning* does not meet the objectives set by the editors of its series.

Professor Wilczynski's Economics *of Socialism* is the third edition of a textbook on centrally planned economies. Wilczynski is a prolific writer with a wide knowledge of the USSR and Eastern Europe. The book is straightforward and clearly organized with a useful glossary. Wilczynski makes comparisons throughout between Marxist principles and practice in the USSR and Eastern Europe, and some readers may find this a valuable feature. But not all of the comparisons are convincing; for example, on page 69 he suggests that the commitment of the socialist countries to industrialization is unexpected, as "originally Marxism was a protest against the Industrial Revolution".

**Martin Cave**


# Economics from Oxford

## The Inequality of Pay
Sir Henry Phelps Brown

Why does or should one person earn several times as much as another? The economist's answer relies mainly on the principles of supply and demand in the labour market, whereas the sociologist finds more significance in the differentiation of the labour force by class, status, and power. This book examines both ways of accounting for the inequality of pay, and uses the insights gained to assess the possibilities of achieving a more equal society. £7.95

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KRISTER HJALTE, KARL LIDGREN and INGEMAR STAHL — Hard covers £5.60 net, Paperback £2.50 net

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MICHIO MORISHIMA — £7.50 net

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Edited by R. O. GOSS — £10.50 net

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# BOOKS

## Change in technology

Innovation and Productivity under Nationalisation
by C. Harlow
Allen & Unwin, £10.00
ISBN 004 600038

Economics Technical Change
by A. Heertje
Weidenfeld & Nicholson, £8.50 and £4.50
ISBN 0 297 77271 6 and 77268 6

These two useful books on technical change are very different, for while Heertje provides an essentially theoretical text in which facts play little part, Harlow has written a very detailed description of the innovation process in the nationalized sector and introduces a theoretical framework very much as a postscript.

Heertje aims to trace the evolution of the analysis of technical change in the literature of economics from Steuart and Smith through to very recent work. The level of treatment is rather uneven. In some chapters the analysis is carried out meticulously while others take the form of surveys and will require a fair amount of previous knowledge.

Much of the analysis of the last fifteen years or so has taken place within the framework provided by production functions. Heertje is good in his treatment of this important area. The use of production functions at both the micro and macro level requires the use of aggregation and in discussing this problem he also notes that the debate has been confined to capital goods and largely ignores the difficulty of aggregating labour. (This is not true of the work of Denison but he only rates two lines, illustrating the theoretical emphasis of the book.) Quite so, which further weakens the foundation of aggregate production functions and attempts to aggregate the stock of human capital.

Heertje reaches the position that micro and macro production functions "fail as a condensed representation of the efficient technical possibilities" but he is then forced, with 100 pages to go, to lamely state that we cannot ignore them as their use is widely current in economic theory and in empirical work. Having set out to analyse what has been done, Heertje has little option to report this work fairly but his position is a little uneasy.

Harlow has no such problems. He is a facts man and he assembles them well. The great bulk of the book consists of studies of major innovations in five nationalized industries (aircraft innovation and BEA, electricity generation, automation telephone switching techniques, mechanization in coal mining and process innovation in the gas industry). These chapters are very well documented and, concerned as they are with the organization of innovation in the five industries, they give a useful insight into their operation in a more general sense.

One issue that Harlow concentrates on is the extent to which the fact that the industries are nationalized affects the innovative process. The main point here is that, as a result, they represent single buyers to suppliers. This means a tendency for the responsibility for research and development to partially pass from supplier to customer and "since supplying companies would find it highly risky to develop new types of capital equipment unless the dominant customer had expressed a preference for the type, the public corporation would find itself unable to order fully developed equipment of the type it preferred unless it had already indicated that preference at an early date."

Further, the supplier has to go along with decisions taken by the customer. Thus the telecommunications industry had to cooperate with the development of the time division multiplex system of telephone switching in the 1950s because the Post Office, at that time, would not consider any alternative—a decision that had unfortunate repercussions when replacement systems had to be ordered in the early 1970s. Harlow is careful not to assign blame but to point out that such problems are inevitable in this market structure, rather than the institutional setting.

Now this seems a pretty important issue with public corporations accounting for a substantial proportion of fixed investment in the United Kingdom. So one might turn to Heertje's book to see what light the theoretical literature can throw on it. Not much—in fact nothing. Perhaps because this has been investigated largely in the literature on conditions favouring successful innovation and on the diffusion of innovations and this is predominantly empirical.

In their different ways these books are both to be recommended although they will appeal to separate audiences. Let us hope, however, that there are some who will read both, for a judicious mixture of theory and facts is surely the best route to a clear understanding of the extremely complex process of technological change.

Keith Norris

## Pride and pugnacity

The Economics of European Imperialism
by Alan Hodgart
Edward Arnold, £5.95 and £2.95
ISBN 0 7131 5911 1 and 5912

Imperialism is an enormously complicated, emotionally charged topic, which is of central significance to an understanding of the world; the books which discuss it are plentiful and the number of students who attempt to answer questions on it must be legion. Disagreement about what it is and what constitutes its historical dynamics is profound and, between certain camps, almost certainly irreconcilable.

It is against this background that Alan Hodgart's book has to be considered. He takes the central feature of economic imperialism to be an attempt by states to obtain an efficient resource use by crossing national boundaries and in discussing this his brief is to take the major writers on the economics of imperialism and to provide an exposition of their views. He is not concerned with the practice of European imperialism but with the attitudes towards it. To a great extent the writings he considers are allowed to "speak" for themselves but in drawing together the threads of the various arguments Hodgart also engages in critical comment of his own.

In the course of his short discussion—the text amounts altogether to 81 pages—we encounter a range of thinkers whose work has been directly or indirectly influential in the course of the continuing debate about imperialism. Marx, Hobson, Lenin, Schumpeter and Keynes all feature as figures who have affected our perceptions of the nature of economic development with which the issue of imperialism is "inextricably bound". In terms of scope the work includes a consideration of early nineteenth-century colonization and imperialism, as well as the major debate over the later expansion of that century when Europeans became "lords of human kind". It also incorporates a chapter on the more recent phenomenon of neo-colonialism and ends with a discussion of past, present and future trends, which touches on the concept of socialist imperialism.

The argument is tightly knit and controlled and the analysis reveals a close understanding of individually important texts. There are, for instance, some particularly perceptive comments on Hobson. Hobson's work is sometimes discussed, particularly by his critics, as if imperialism could be explained in terms of economics. But Hodgart rightly acknowledges that while such pressures might constitute the "taproot" of imperialism Hobson was clearly prepared to grant an importance to "real and powerful motives" such as "pride, prestige and pugnacity".

Hodgart also points out that even if investment after 1870 did not flow mainly to the newly acquired imperial territories, as Hobson suggested, and capitalists preferred instead to build up their interests in the more advanced parts of the world (as Lenin correctly noted that they did), this does not necessarily mean that Hobson was misguided in claiming that the small investing public, the self-effacing rentier and the stock exchange gambler, did badly out of their speculative investments. We need to know more about this. It also has to be recognized in discussing Hobson's views — and they provide a crucial fulcrum for the later debate—that he never believed that effective demand for consumer goods from the indigenous population of Asia and Africa would solve the under-consumption crises of capitalism. The moral in all this is that we should give our sources the attention and reflection they deserve.

But however much attention we pay to the texts disagreement is certain. The whole debate is influenced by political, psychological and ethical considerations which intrude into economic analysis. Before you read your economics know your economist. But while this complicates analysis it is wholly imperialism takes place within an appropriate that a discussion of inter-disciplinary context. In that sense we should be aware of the self-imposed limitations of the present study. But, given that, one wishes for more than a passing reference to the writings of Koebner and Fieldhouse, both of whom have made combative attacks upon the economic interpretations of imperialist expansion. At the same time, one is less surprised that Hodgart's book is one which essentially discusses European opinion on European imperialism. After all, the cultural patterns deriving from our colonial and imperial past are still with us.

Colin Holmes

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# BOOKS

## Monetary matters

Inflation, Exchange Rates, and the World Economy
by W. M. Corden
Clarendon Press: Oxford University Press, £4.50
SBN 0 19 877096 0

In so far as it is possible to write a textbook in a field as turbulent as international monetary economics in the 1970s, Max Corden has made a most useful contribution. It would be surprising indeed, if Corden's textbook did not become the preferred reading of many students in this field. The clarity of exposition is outstanding and the initially surprising, and subsequently obvious, insights into aspects that others have missed is stimulating.

Four main topics are discussed and each is of theoretical or practical interest. These are: developments in balance of payments theory, inflation and the exchange rate regime, the international consequences of the petro-dollar slop and European monetary integration. Each of the chapters is equipped with an excellent bibliography that is always up-to-date and pleasingly compact for the hard pressed student. A brief discussion of three of these topics should be enough to give the flavour of the book.

Corden does not claim to have all the answers. Indeed, in some cases research is still at a controversial stage. One of the main issues for the 1970s and beyond is the role of the foreign exchange rate regime (fixed, floating, managed) in inflation. Since Corden has written a textbook, the conflicting arguments are set out. The result is that those who want a cut and dried answer will probably be disappointed.

Thus, for the world as a whole floating exchange rates may have a greater or lesser inflationary bias compared with a pegged-rate regime. It all depends upon the monetary policy of the individual central banks. But Corden points out that intervention by the authorities to offset fluctuations in the capital account and the consequent ratchet efforts on inflation, is certainly desirable. For individual countries, floating rates allow a country to choose its own inflation rate. Certainly, international comparisons of inflation rates widened after May 1973 when most industrial countries moved over to floating rates.

The technicalities of the effect of the oil price rise are discussed in three separate chapters. Two principal points are, first, the five-fold increase in the price of oil was not necessarily inflationary for the industrial countries. Indeed, the higher price of oil was deflationary because it induced a massive switch of expenditure on to this commodity. The subsequent inflation was the result of the monetary expansion set off by governments trying to maintain the level of aggregate demand and employment. Second, the much feared world economic crisis has not materialized principally because petro-dollars were recycled. Industrial countries were able to finance their current account deficits by capital account inflows from the surplus OPEC countries. Given that OPEC had produced the oil, they had nowhere else to invest their surplus funds but in the New York and London financial markets.

Finally, on a more theoretical issue, Corden emphasizes the importance of the monetarist view of the balance of payments. Balance of payments disequilibria arise when an economy as a whole attempts to adjust the actual money stock to the desired level. Thus a deficit is "equal to the excess of domestic credit-creation over the increased demand for cash balances" (p 47). The excessive DCC lowers interest rates and induces increased private sector expenditure on imports as well as capital outflow. But monetary outflow will automatically cease when the excess credit is worked off. Corden points out that a deficit can persist only if there is continued excessive monetary expansion. Moreover, import quotas (supported by the Cambridge school) will reduce a deficit when they induce an increase in the size of the desired money stock, which they will if they cause higher prices (a likely outcome).

Paul Hallwood

## A decade of aid

Aid and Development in Southern Africa
by David Jones
Croom Helm, £11.95
ISBN 0 85664 511 7

To write a book with this title appears to be courting disaster on three separate fronts. The area is one of the most emotive in the world. The whole subject of aid, especially whether enough is given by Britain, or indeed, whether aid can ever be associated with development, has provided and will continue to provide fuel for endless arguments. Furthermore, to write about any African country is to be frequently caught with dated material, but when southern Africa is concerned that risk can be even greater.

Mr Jones is well aware of these problems but the first is more apparent than real. Presumably "southern Africa" is in the title as a sales booster, for only Botswana, Lesotho and Swaziland are considered, not even the Republic of South Africa entering widely into the book. The author has avoided the problem of rapidly changing events by treating his topic as a historical rendering, reviewing development and aid for the decade to 1974.

The book is constructed in four parts, one given to a general introduction and one to each of the three nations. In terms of the author's approach and achievement it is better viewed as being of tripartite form: the reasons for giving aid and the methods by which that is achieved; the benefits which have accrued to the recipients and what future policy towards them might be; and finally a detailed study of each country regarding their economic situation and the way aid has been used and the effect it has had. That the overall conclusion regarding the aid should be placed before the consideration of each country might appear constructionally odd but the wealth of detail there would have seriously divorced the section on general aims of aid donation from the conclusions as to its benefits.

Jones has achieved two worthwhile goals in this carefully written and researched book. For those interested in the former High Commission Territories there is here a source of information which is difficult to obtain from any one existing work. Even the fact that the material does not go beyond 1974 is no great disadvantage for although southern Africa is politically unstable, the economy of these three territories is not notable for sudden changes or developments. Indeed it may well come as a surprise that the Ministry of Overseas Development "habitually offers up to 25 per cent more aid than it has at its disposal, because of its experience that recipients more often than not fail to spend all the aid on offer".

Of equal importance to the detailed coverage of the three territories is the critique of the aims and methods of British aid. The general verdict is that it has been "virtuous though sometimes frustratingly neutral". Perhaps this is because Britain has no overtly declared aid policy, what is given and to whom depending upon "development potential, need and political and commercial considerations". Unlike Ministers of Overseas Development who are carefully vague about British aid philosophy, the author, having looked at arguments for and against aid in general, makes his views quite clear. Whatever one's standpoint on this it is obvious that Botswana, Lesotho and Swaziland have been treated relatively generously in terms of per capita—£3.00 compared with 10p for India. Indeed the author suggests that Botswana and Swaziland no longer need such preferential treatment.

Graeme Whittington

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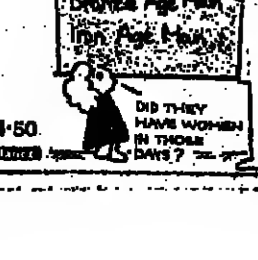


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# BOOKS

## Model answer

The Labor-Managed Economy
by Jaroslav Vanek
Cornell University Press, £12.50
ISBN 0 8014 0955 1

Labour-management is a relatively new branch of economics, and Jaroslav Vanek, as one of the pure economists attempting to subject it to rigorous economic analysis, is a leading theorist. In this book he brings together 15 essays, each of which explores and extends the theory underlying a particular problem of the labour-managed economy. It consequently lacks a unified argument, but this scarcely matters in view of his earlier, more complete works.

Professor Vanek believes in labour-management of the Yugoslav type: "In brief, the labour-managed system appears to me to be superior by far, judged on purely economic criteria, to any other economic system in existence." He believes that it is as capable as, if not better than, capitalism in optimizing the use of capital and labour resources, producing a stable economy, preventing inflation and ensuring a fair distribution of incomes and optimal production methods; quite apart from its moral advantages. This is despite his recognition of the existence in Yugoslavia of considerable unemployment and misallocation of capital, severe inflation and unfair income differentials, all of which are reinforced by, if not caused by, the system of labour management as practised there.

Vanek proposes a series of reforms necessary to "liberate the (Yugoslav) working man from himself as a collective capitalist". One of these is that the practice of self-financing should be avoided in labour-managed economies. He proposes "neutral" central bodies that would receive a realistic "rent" from each enterprise for the use of its capital assets, and would act as the sole providers of investment finance at an interest rate that would reflect capital's scarcity and marginal productivity. His approach reveals a fundamental difference of attitude to the relationship between labour and capital. Yugoslavia has developed self-management via Marxism and the labour theory of value; Vanek is concerned with marginal analysis and optimization: Marx barely gets a mention. The Yugoslav system thus insists that workers in each enterprise should decide what percentage of enterprise earnings shall go towards reinvestment: Vanek wants this amount centrally determined and collected. His "reforms" would deprive Yugoslav workers of their most dearly held rights.

There is no doubt that he is right. His reforms are necessary if a labour-managed system is to match capitalism in its ability to optimize the use of national productive factors. A system based on the Marxist view of the relationship of capital to labour will never do this. However, the concept of labour-management may lose much of its appeal if divorced from Marxian tradition; one fears that Vanek's model may share the fate of Esperanto: a good idea that inspires no one.

It is impossible to mention all the conditions to which this model is subjected in this work, and to do justice to some of the more mathematical parts would require a better analyst than myself. Worthy of note is the investigation of the potential advantages of labour-management for underdeveloped economies but here, too, competent central authorities are required; indeed, throughout his model they play a larger role than might been posted.

Labour-management needs such people as Vanek to set hard logic against the self-congratulatory rhetoric that so often mars Yugoslav contributions to the subject. However, his model, mathematically neat and impeccably defended, achieves internal consistency by excising from existing systems all the Marxist imperfections which provided the original inspiration to give workers control over capital. As such, it would not be acceptable to Yugoslavs or other East European reformers. However, as education advances throughout the world so must the degree of labour participation in management and the theoretical advances that Vanek has made should soon become increasingly important outside the socialist world.

**John Waller**

## High finance

The Evolution of the International Monetary System 1945-77
by Brian Tew
Hutchinson, £6.50 and £3.25
ISBN 0 09 129210 7 and 211 5
The Failure of World Monetary Reform 1971-74
by John Williamson
Nelson, £7.50 and £3.50
ISBN 0 17 711208 5 and 212208 0

The recent history of the international monetary system is examined in these books. In effect, Professor Tew's book is an updating of his *International Monetary Co-operation* which, as the blurb puts it, "was for many years the classic textbook for international monetary economics" and it covers the immediate post-war years, the "Bretton Woods system" and the latest phase, "from pegging to floating".

As readers of his previous book will know, Tew's style requires concentration. He succeeds in summarizing a great deal of material in a fairly small compass, which means that the book is better dipped into than read straight through. International monetary arrangements and negotiations involve issues of economic theory and international relations. If these are not clearly described, a history of institutional changes can easily resemble the design on the jacket which is a jumble to the uninitiated of esoteric symbols: G10, G5, C20, OSA, BIS, etc. But this is a good short summary of the subject—perhaps the best—and will have to be considered seriously by teachers of international economics.

Professor Williamson's book takes the attempt by the Committee of Twenty (C20) of the International Monetary Fund to devise an international monetary constitution to replace the one that collapsed in 1971. There are excellent sections on the reasons for the collapse of the previous arrangements, current controversies on international monetary economics, and on the virtues and defects of the current "non-system", which give the book a much wider interest than the mere chronicling of an episode in monetary diplomacy.

Williamson writes as one who was employed by the International Monetary Fund at the time, and saw the committee's workings from the inside. He creditably avoids revealing anything not in the public domain: "revelations, in so far as there is anything left to be revealed, come more appropriately from elder statesmen". But this book could probably not have been written except by an economist in this position, and is almost certainly the definitive account of the episode.

The title is perhaps over-dramatic, since the author does not regard recent changes as a disaster. He argues that the "adjustable peg" exchange rate system was inherently unstable, and that the [illegible] of the Bretton Woods [illegible] has not meant the collapse [illegible] convertibility and international collaboration. However, floating has been "dirty" rather than "clean", in other words, governments have not refrained from intervening in the foreign exchange markets. Williamson believes that, in this situation, some clear-cut rules of the game are needed, and that a reserve system based on Special Drawing Rights would have been desirable.

He attributes the failure to [illegible] some such agreement [illegible] to the clash of national interests [illegible] the inactive and conservative [illegible] of the secretariat set up to [illegible] the committee. In spite of [illegible] the committee often had 160 [illegible] engaged in what one [illegible] called "multilateral monetary [illegible]". In such a situation, Williamson believes, international civil servants must identify the key issues and put up proposals likely to command assent.

Finance Ministers [illegible] people with a vast range of responsibilities, and they cannot be expected to establish a [illegible] mastery of the international monetary system sufficient to enable them to judge [illegible] between alternative options, engage in intelligent discussion of whether a proposal has been reformulated in a way that meets their vital concerns, or to [illegible] a technical argument as [illegible] the necessity for as great a withdrawal as possible. Officials are supposed to be capable of undertaking these tasks, but if they abdicate their responsibilities by insisting on "keeping the options open" for their Ministers to decide, the chances are that the result will be that the Ministers decide something silly or are unable to decide on anything at all (p175).

It is a conclusion that rings true and is illuminated by no entry from the Nixon tapes.

*Haldeman:* Did you get the report that the British floated the pound?
*President:* No I don't think so.
*Haldeman:* You want a run-down?
*President:* No, I don't.
*Haldeman:* Flanigan argues shows the wisdom of our refusal to consider convertibility until we got a new monetary system.
*President:* Good. I think he's [illegible] It's too complicated for me to get into. *(unintelligible)* I understand.
*Haldeman:* Burns is concerned about speculation about the lira.
*President:* Well I don't give a [illegible] *(expletive deleted)* about the lira. (p175)

One cannot help feeling that even British Ministers, faced with some of the technical issues discussed in these two books, might feel the same way as President Nixon.

**Graham Hall**


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# BOOKS

## Of cars and men

Chrysler UK: A Corporation in Transition
by Stephen Young and Neil Hood
Praeger, £18.40
ISBN 0 275 23820 2

The construction of a strip mill at Ravenscraig was part of a plan to shore up employment in Scotland and pave the way for reintroducing the motor vehicle industry there. The Rootes factory, built at Linwood and in operation by 1963, became the largest unit in the Rootes group, accounting for about one-third of those employed by the company in the United Kingdom. Rootes would have done better if it had been allowed to expand its existing factories or if it had spurned government inducements to expand elsewhere and turned itself into a producer of high quality cars along the lines of Volvo.

Almost everything was against Linwood as a seat of operations. It was distant from markets and sources of supply; management and labour were inexperienced; the models produced did not attract a sufficiently wide market or command high prices. To make matters worse, Rootes was badly organized and commercially insecure at a time when medium-scale producers were likely to be overwhelmed by a process of rationalization which would include the establishment of strong international linkages. For Chrysler the latter took the form of purchasing interests in Barreiros (Spain), Simca and Rootes, shortly after Linwood started up.

The interest in Rootes turned out to be a disaster. Losses were made in six of the succeeding 11 years and amounted to £70m in total by 1975. Private industry cannot be conducted along such lines. The lame duck rescue that followed is too recent to require description.

Too little has been written by economists about the process of *industrial decline* to demonstrate how it can be foreseen, avoided or accommodated in such a way as to minimize waste and disruption. Young and Hood do not help as greatly with such problems. They are long on facts and short on analysis and speculation. So much so that it is sometimes a struggle to read the chronology of events and to try to distinguish what matters and what does not. Is the vehicle industry destined to become the stamping ground of few firms with component factories in many countries, and assembly lines in those where labour is cheap and willing? This seems to be the recipe of Ford in Europe which has a record of success. Or are there other ways of organizing production more acceptable to governments, trade unions and the consumer?

We are frequently reminded in this book that success in vehicle manufacture depends on many things. So it does. But two things stand out: the need for good design and large amounts of capital. Table 5.11 (p158), difficult to interpret though it may be, seems to show that output a man responds strongly to investment; indeed, it might be concluded that an increase in capital a man leads to an even greater increase in the value of output a man a year. It so the moral is obvious. Chrysler UK is very low on capital. How much more investment will be needed to put it on a safe footing, £5,000 or £10,000 a man?

There may also be lessons for regional development from the experience of Chrysler. As in Northern Ireland, it might have been better at Linwood to have encouraged the manufacture of components rather than finished vehicles. Transport costs would have been cut, longer runs would have been possible and the potential of a European supplier built up. Setting up large factories in development areas may seem to be an easy way to cure unemployment but it is dangerous if the industries concerned are not expanding. If the future is in doubt there is much to be said for small enterprises, and possibly capital intensive ones. If they fail the capital is lost but the small number of jobs at stake give no cause for costly government intervention.

Young and Hood write with discernment about the industrial relations aspects of Chrysler's problems. At times the company's proposals for the reform of industrial relations were far-reaching and imaginative, though not always recognized as such by the unions. It is refreshing to read that a court of inquiry concluded that "In terms of payments and related benefits this is an Agreement that reasonable men should be able to accept without difficulty" (Professor D. J. Robertson). But often the reverse was the case and heavy handed bargaining by management was counterproductive. In foreign markets labour unrest had destructive effects; Chrysler UK lost the American market to Japan because of this. The Avenger, sold as the Plymouth Cricket (Heaven help us!) in America was replaced by the Japanese Colt disguised by a new grille to resemble the Avenger model and sold under the same American name!

The fatalistic view of the authors about Chrysler UK appears simply to be: "Too small to make money, it was always too large to close down". If so, an equally fatalistic reviewer concludes that it is going to be a very costly rescue.

**J. R. Parkinson**

## Rubber money

Primary Commodity Exports and Economic Development — Theory, Evidence and a Study of Malaysia
by J. T. Thoburn
J. Wiley, 9.00
ISBN 0 471 99441 3

There is an influential school of thought in economics, dating from Smith and Mill, which regards a country's export performance as a major determinant of its rate of economic progress. This optimistic view of trade was challenged in the 1950s in the light of the historical experience of primary producers among today's less developed countries. Since then it has provided considerable mileage for economists attempting to decide between the rival viewpoints.

Dr Thoburn's contribution, which is based on the Malaysian experience with tin and rubber exports, is set within the "staple" tradition. In identifying and measuring the effects of exports on national income, many staple theorists have tended to work within a rather restrictive neo-classical version. One of the best known "tests" of the staple theory, that carried out on the Canadian wheat boom by Chambers and Gordon, measured the gains from trade solely in terms of increased rents and real wages accruing directly to those factors of production employed in the export sector.

Thoburn has a more catholic approach to the possible long-term costs and benefits of Malaysian exports of primary products. For both tin and rubber he has considered a number of possibilities, including the generation of employment and associated income distribution, the extent of forward and backward linkages determined in an input-output framework, and the amount of export income retained locally with its effects both on local investment and on final demand via wage employment. Many of his conclusions are of interest, though in a study which justifiably pays a great deal of attention to the impact of exports on the inducement to invest one might have hoped for a little more information on motivations and responses at the micro-level, especially in the indigenous rubber smallholding sector. I found particularly interesting the high proportion of capital expenditure in tin and rubber which historically has been financed from domestic resources rather than from capital inflow; the high proportion of capital expenditure for rubber and tin which has been local in character; the increase in the proportion of locally retained export income which has been the result of the rising proportion of profits paid in taxes; and the high average propensity to consume local products on the part of wage earners in tin and wage earners and smallholders in rubber. On the latter point, however, I would disagree with the author's claim to provide something meaningful in the way of export multipliers, in the absence of hard information on marginal propensities to save and import in different sectors.

There is a great deal of value in Thoburn's book which will be appreciated by development economists. The major criticism I would make concerns its organization and presentation. The chapters stand up well individually but are not drawn together to provide a coherent story. Numerous lengthy footnotes accompany each chapter, and the whole is set in an unfortunate typeface which severely affects the ease with which the information in the book, and especially that contained in its many tables, may be assimilated.

**Barbara Ingham**

## Reviewers

Martin Cave is lecturer in economics at Brunel University;
Howard Glennerster, author of Social Service Budgets and Social Policy, is senior lecturer in social science and administration at the London School of Economics;
Keith Harris, reader in economics at Brunel University, is author of Economics of Research and Technology;
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